IN THE ROYAL GALLERY, DRESDEN

THE NIGHT, By Correggio

Deep in the shelter of the cave,
The ass with drooping head
Stood weary in the shadow, where
His master's hand had led.
About the manger oxen lay,
Bending a wide-eyed gaze
Upon the little new-born Babe,
Half worship, half amaze.
High in the roof the doves were set,
And cooed there, soft and mild,
Yet not so sweet as, in the hay,
The Mother to her Child. — *Nora Archibald Smith.*

THE representation of the Christ Child lying in the manger, or in the arms of his Mother in the stable at Bethlehem, with the ox and the ass, wide-eyed with wonder, and singing angels in a cloud of glory, is usually referred to as "The Nativity." Sometimes shepherds are also depicted entering the door, or kneeling in front of the Holy Child. Many great artists have been inspired to paint this solemn scene. The most celebrated of all Nativities is that by Correggio represented on the other side. It is also called "La Notte," or "Night," and was painted in Reggio in 1552 for Alberto Pratoneris. Eventually it found its way to the Dresden Gallery, where it occupies the second place only to Raphael's "Sistine Madonna." Not only is this picture revered for its deep, religious sentiment, but artists admire it for the original way that Correggio handled the light and shade. The foreground is in somber shadowy brown, and the sky and background are deep, midnight blue. The whole picture is illumined by the supernatural radiance from the Holy Child. This light is reflected upon the face of the Mother and upon the cloud supporting the angels. It dazzles the eyes of the shepherds who have hastened to the stable on hearing the glad tidings. It is so bright that the woman by the shepherds is obliged to shade her face with her hand.

Not only great painters devoted themselves reverently to painting pictures of the Holy Night and the scene in the stable in Bethlehem, but churches frequently arranged representations of the cradle, crib, *crèche*, or *presepio*.

These representations seem to have been derived from St. Francis of Assisi, who celebrated Christmas at Greccio in 1224 with a real manger and a real ox and real ass. By way of explanation he said: "I would fain make memorial of the Child who was born in Bethlehem, and in some sort behold with bodily eyes His infant hardships; how he lay in a manger on the hay with the ox and the ass standing by."

The *presepio* as arranged to-day is often very elaborate and decorative. It is used in some American churches. In Italy and Spain it is often set up in private houses and simple homes, where it is the center and focus of the Christmas ceremonies.

Nativity Plays in which the Virgin, Joseph, the Shepherds and the Wise Men and Star appear were popular throughout Europe during the Middle Ages. Morality and Mystery Plays were also performed at Christmas. In the Middle Ages the visit of the Three Kings was celebrated by a little drama called the "Feast of the Star." It was given in the churches. Three priests clothed as kings with attendants carrying offerings met from different directions before the altar. The one who came from the East pointed with his staff to the star. After kissing each other they sang: "Let us go and inquire." A precentor then sang: "Let the Magi come." A procession was then formed and walked to the altar where the star began to blaze. The priests drew aside the curtains and showed them the Holy Child, to whom they gave their offerings. At Milan the Festival of the Three Kings was particularly elaborate and very famous.

At the time of the Crusaders the "Seven Champions of Christendom" was a popular play, and even more popular was "St. George and the Dragon." The latter was often performed by the mummers on their visits to wealthy houses.

Puppet-shows, masquerading and revels were a part of Christmas in England at the period when our own country was settled. They were often conducted by a Lord of Misrule. This mock officer had a large allowance of money and a splendid costume. He had charge of all the plays and games for the holidays. On the Twelfth Day he had to abdicate.

Very famous were the masques and plays given at the four Inns of Court in London—Lincoln's Inn, Gray's Inn, and the Inner and Middle Temples. These Inns of Court vied with each other in getting up splendid entertainments. These plays date back to the reign of Henry VI. They were very famous in the reigns of Elizabeth and James I. For instance, Shakespeare's "Twelfth Night" was performed at Middle Temple Hall on Twelfth Night, 1602. Some of Ben Jonson's Masques were written for these Inns and staged magnificently by Inigo Jones.

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IN THE ROYAL MUSEUM, ANTWERP

THE ADORATION OF THE MAGI. By Peter Paul Rubens

Adoration of the Magi

TWO

"What means this glory round our feet,"
The Magi mused, "more bright than morn?"
And voices chanted clear and sweet,
"To-day the Prince of Peace is born!"

"What means that star, the Shepherds said,
That brightens through the rocky glen?"
And angels, answering overhead,
Sang, "Peace on earth, good-will to men!"

—*James Russell Lowell*

THE Christmas season lasts from the 25th of December to the 6th of January—the Twelfth Day after the Nativity of Christ. This is also known as Epiphany, or Three King's Day, the day when the Three Wise Men, or Magi, led by the Star, arrived in Bethlehem with their offerings for the Holy Child. Like the Nativity and the Adoration of the Shepherds, the Adoration of the Magi appealed to the Italian and Flemish painters. It also appealed to the patrons of the artists who liked to dress in magnificent robes and pose as the Wise Men of the East. They were willing to pay large sums for the privilege; and, consequently, the Adoration of the Magi was frequently chosen as the altar-piece to be placed in a cathedral, or fine church, by a wealthy donor.

No artist was fonder of the subject than Peter Paul Rubens (1577–1640), who, like all the other Flemish and Dutch painters, delighted in depicting velvets, brocades, furs, lace, jewels and caps of gold. His three most famous Adorations of the Magi are now in the Prado Gallery, Madrid, the Palais des Beaux-Arts, Brussels; and the Royal Museum, Antwerp. The latter is reproduced opposite. It was painted in 1624 and, although of heroic size, in only a fortnight! This picture, formerly in the church of St. Michael, is admired for its wonderful variety in the attitudes of the figures; in the freedom and boldness of drawing, and in the gorgeousness of color.

The Virgin is of the Flemish type of beauty, somewhat fleshy and with large, strong hands. Rubens was as famous a painter of animals as he was of persons. Notice should, therefore, be taken of the beautiful Arabian horse on the left, the ox on the right and the two camels that survey the whole scene with an air of great surprise.

The Visit of the three Wise Men of the East (the Magi, as they are styled in the original Gospel of St. Matthew) is a beautiful part of the Story of Christmas.

Legend transformed these Wise Men into Kings and gave them names: Melchior, King of Nubia, brought gold; Balthazar, King of Chaldea, brought frankincense; and Jasper, King of Tarshish, a black man, brought myrrh.

Led by the Star, they arrived in Bethlehem, where the Star stopped and shed its light over the lowly stable, where the angels were singing.

The skulls of the Three Kings, found according to tradition by St. Helena, mother of Constantine the Great, were placed by her in the Church of St. Sophia in Constantinople, where they remained until removed to the Cathedral of Milan. In 1164 they were taken to the Cathedral of Cologne and placed in a magnificent golden reliquary, glittering with jewels. This reliquary was deposited in a marble shrine, which became one of the most famous of pilgrimage places. This reliquary is now preserved in the treasury of the Cologne Cathedral. It was undoubtedly made in the twelfth century, and is in the form of a miniature Gothic church. It was restored in 1807. The Magi were sometimes referred to as the "Three Kings of Cologne."

As a festival Twelfth Day, or Twelfth Night, was long popular. It was kept by all classes and conditions of men. The Twelfth Night cake was an institution. Those who found the bean and pod hidden within it were chosen King and Queen of the evening's revels. Plays, masquerading and fun-making were indulged in. To-day as January 6th is the closing day of the holidays, it is becoming more and more a date for particular revelry.

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MIDNIGHT MASS ON CHRISTMAS EVE IN ALSACE. By P. HEY

THE STORY OF CHRISTMAS

Midnight Mass, Yule Log and Yule Candles

THREE

Some say that ever 'gainst that season comes
Wherein our Saviour's birth is celebrated
The bird of dawning singeth all night long;
And then, they say, no spirit can walk abroad;
The nights are wholesome; then no planets strike,
No fairy takes, nor witch hath power to charm,
So hallow'd and so gracious is the time.

—*Hamlet.*

IN all countries the Midnight Mass on Christmas Eve is one of the most picturesque and solemn features of this holy season. Those who step from the dark, cold streets or from the snowy and sleety country road into a warm church, or cathedral, where the altar is ablaze with candles and tastefully decorated with fragrant Christmas garlands, are deeply affected by the contrast. The Midnight Mass is significant of the Light of the World shining upon the darkness.

Light is a part of the emblematical celebration of Christmas.

Christmas was called the Feast of Lights because they used many lights, or candles, at the feast; or rather, because Christ, the Light of all Lights, had come. The lighting of the candles on the Christmas tree is significant of this.

The northern races of ancient Europe, long before the birth of Christ, celebrated the two great turning-points of the sun's apparent course through the sky, or, in technical terms, the summer solstice and the winter solstice, by kindling fires in worship of the "fire-wheel," as they called the sun. The Yule Log marked the indoor winter celebration, as the Midsummer Bonfires marked the outdoor summer celebration. The ancient fire-festival of Jule, therefore, survives in the Yule Log.

The rites regarding it varied in every country. In some places the family assembled and escorted the log to the hearth in procession, singing a carol, or Noël, on the way. The youngest child poured a glass of wine upon it and then the log was lighted. All sat around it and told stories. In other places the master of the house performed the ceremony, sprinkling the log with wine and oil, or wine and salt. If it burned well, the blessing of heaven rested upon the house. The charred remains were saved. In other places the trunk of an oak was placed on the hearth, sprinkled with holy water and lighted as the bells called the faithful to the Midnight Mass.

In England the Yule Log was often so large that it had to be drawn to the house by horses and taken into the room by means of levers and rollers. It formed the back log. A remnant was preserved for lighting the next Yule Log.

With the Yule Log the Yule Candle was closely associated. "On the night of Christmas Eve," says the antiquary, John Brand, "our ancestors were wont to light up candles of an uncommon size, called Christmas Candles, and lay a log of wood upon the fire called a Yule Log, or Christmas block, to illuminate the house, and, as it were, to turn night into day. A tall mould candle, called a Yule Candle, is lighted and set on the table. These candles are presented by the chandlers and grocers to their customers. The Yule Log is bought of the carpenters' lads. It would be unlucky to light either of them before the time, or to stir the fire during the supper; the candle must not be snuffed, neither must anyone stir from the table till supper is ended. In these suppers it is considered unlucky to have an odd number at table. A fragment of the log is occasionally saved. A piece of the candle should likewise be kept to ensure good luck."

The Christmas Log was one of the features of the season in the southern homes of the United States. The tree was selected, cut down, and the great log hauled to the "big house," followed by a procession of merry children, slaves, and such of the "grown-ups" as had pleased to join the party. Placed on the big, shining brass andirons in the large hall, already decked with greens and hung with mistletoe, its sheets of flame, its cheerful crackle, its ruby sparks, its rich glow and its delicious warmth added no little to the spirit of Christmas. Dancing and merry-making were allowed as long as the Yule Log held out; and, as the log was the very biggest that could be found, the Virginia Reel, which always closed the evening's revelry, was, as a rule, not called for until faint streaks of dawn began to appear.

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IN THE POSSESSION OF THE ARTIST

CHRISTMAS BELLS. BY EDWIN H. BLASHFIELD

THE STORY OF CHRISTMAS

Christmas Carols and Hymns

FOUR

And all the bells on earth shall ring,
On Christmas Day, on Christmas Day,
And all the bells on earth shall ring
On Christmas Day in the morning.

And all the angels in heaven shall sing,
On Christmas Day, on Christmas Day,
And all the angels in heaven shall sing
On Christmas Day in the morning."

—*Old Carol.*

THE Christmas Carol found its way from pagan celebrations into those of the church. The Carol seems to have been a song with a dance. It was certainly used in that sense by Chaucer and other old writers. The word was also used to distinguish festive songs from hymns. Now the two are confounded and collections contain both carols and hymns. Christmas Carols were an important feature in the Mystery Plays of the Nativity in the fifteenth century, and carols were sung and danced around the crib, or manger, of the Holy Child set up in churches and private houses. Some of them had Latin lines or refrains.

So popular were carols that Winkin de Worde ("worde" pronounced like "cord"), one of the earliest of printers, printed a set of them in 1521, which contained among others the celebrated Boar's Head Carol. Old airs have also come down to us. They greatly resemble old psalm-tunes.

The singing of carols was a part of every Christmas celebration. Those of a serious nature were sung in the churches, through the streets and before the houses on Christmas Day. The convivial, or "jolie carols" were sung by the minstrels and the company at the revels in the homes of the wealthy. Some of them are called "Wassail songs," and go back to Anglo-Saxon times.

Many English carols have the refrain "Nowell." It is taken from the French *Noël* (no'-ell), which means Christmas and also carol. The best English carols of the sixteenth and the seventeenth centuries are songs of feasting and pagan ceremonies rather than of the Holy Child and His Mother. Then came such carols, as "God Rest You, Merry Gentlemen," the "Cherry Tree Carol," and "I Saw Three Ships Come Sailing In," which might be called ballads. Milton's great "Hymn on the Nativity" and Herrick's songs stand by themselves, being neither hymns nor carols.

The French *Noëls* correspond to the English carols. The earliest date from the eleventh century, and are couplets alternately in Latin and the dialect of the special province where they were written. As a rule the Angels and Virgin sing in Latin and the Shepherds in the dialect. The *Noël* appears in the fifteenth century manuscripts, half in Latin and half in French. The sixteenth century *Noëls* resemble ballads, and are valuable pictures of the customs of the times.

The best known of all Christmas hymns is Adeste Fidelis. It is supposed to have been composed in France in 1700, and it has been sung in all the Roman Catholic churches ever since. In 1797 it was sung in the Portuguese Embassy in London, whence it got the name of "Portuguese Hymn." The English adopted it about 1841. Protestants sing it to the words "O Come All Ye Faithful." Another early one is "*Veni, redemptor gentium*," written by Ambrose Archbishop of Milan, a great musician as well as a great theologian, who died in 397.

In the list of Christmas hymns Watts's "Hush, My Dear, Lie Still and Slumber," Tate's "While Shepherds Watched Their Flocks by Night," Heber's "Brightest and Best of the Sons of the Morning," and Wesley's "Hark, How All the Welkin Rings" are the best known and best loved.

In Italy *pifferari* (or pipers) come down from the mountains and play before the shrines of the Virgin in the Italian cities. Their tunes are sweet and plaintive, as every one knows who has heard the "Pastoral Symphony" in Handel's oratorio of "The Messiah," which has one of the *pifferari* airs for its theme.

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HAULING IN THE CHRISTMAS TREE. By R. Swain Gifford

Now of all the trees by the King's highway,
Which do you love the best?
Oh, the one that is green upon Christmas Day;
The bush with the bleeding breast.
Now the holly with her drops of blood for me,—
For that is our dear Aunt Mary's tree.

—*R. S. Hawker.*

AS far back as we find any record of the human race we also find the custom of decorating houses and temples with evergreens on occasions of rejoicing. Primitive and civilized nations are alike in this. We are only continuing very ancient traditions when we hang up our Christmas wreaths and garlands. Holly and mistletoe take precedence of all other evergreens. Holly owes its importance in the Christmas season to paganism. The Romans dedicated holly to Saturn, whose festival, the Saturnalia, was held in December. The early Christians, in order to avoid persecution, used to deck their homes with holly during their celebration of the Birth of Christ, as it was a means of protection. After that holly became associated with Christmas and it became the emblem of emblems. One of the earliest carols, dating from the fifteenth century, describes the contest of Holly and Ivy for the mastery. It is decided that Holly, with its beautiful red berries, shall reign in the hall instead of Ivy, with its black berries. Moreover, Holly attracts many sweet birds, but Ivy has only the owl.

The mistletoe is a mystical plant; the Greeks venerated it. Virgil gave it to Æneas as the "Golden Bough," to guide him to the underworld; and the Scandinavians dedicated it to their Goddess of Love, Friga. The mistletoe is, however more closely associated with the Druids than with any other race. At the New Year the Druids marched in solemn procession into the forest, the high priest ascended the oak, and, with a golden sickle, cut the mistletoe, dropping the plant into a white cloth held by other priests. The sacred plant was dipped into water and then distributed among the people, to whom it was supposed to bring good luck of all kinds.

The Church never sanctioned the mistletoe. No edicts were strong enough, however, to banish it from the decorations of the house. The old tradition of hanging of the mistletoe bough is lost in the mists of antiquity. More than likely kissing under the mistletoe has something to do with the Northern Goddess of Love. The saying goes that the maiden who is not kissed under the mistletoe will not be married within the year. The ceremony is not properly performed unless a berry is plucked off and given with each kiss to the maiden. When the berries are all gone, the privilege of kissing ceases.

It is a popular error that the mistletoe grows on the oak only. It prefers the apple-tree. Most of the English mistletoe comes from the Herefordshire apple orchards. America also gets a great deal of mistletoe from Normandy, and so does England. Poplar, linden and white thorn also attract the strange parasite. When once the seed has found a congenial home, it drives its roots deep into the wood and draws sap and nourishment. The European variety is known as *Viscum album*, and its stems divide by forking. In the United States the common species, called *Phoradendron*, grows on various hardwood trees from New Jersey southward.

In America and in England the Christmas tree is rarely seen in homes where there are no children. The Christmas tree is a glorified toy. Germany is the home, *par excellence*, of the Christmas tree, which is lighted in that country on Christmas Eve. Presents in Germany are not hung upon the tree. The Christmas tree was introduced into America by the German and Dutch emigrants. It was practically unknown in England until after the marriage of Queen Victoria to the Prince Consort, who was a German and introduced the German Christmas tree into the royal household. The idea of a tree hung with gifts has been known to the Hindus from time immemorial. Its origin probably goes back to ancient tree-worship.

The decorations remained in the churches until the end of January; but the Church required everything to be cleared away before Candlemas Day (February 2). If a leaf or berry happened to be left in any pew, some member of the family that occupied that pew would be sure to die within the year. The same superstition held good with regard to private dwellings. Every particle of greenery used at Christmas had to go at Candlemas. Herrick sings:

"Down with the rosemary, and so,
Down with the bays and mistletoe,
Down with the holly, ivy, all
Wherewith ye drest the Christmas hall,
That so the superstitions find
No one least branch there left behind."

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THE GODDESS OF OUR KITCHEN. By F. S. Church

Now all our neighbors' chimneys smoke,
And Christmas logs are burning;
Their ovens they with baked meats choke,
And all their spits are turning.
Without the door let Sorrow lie;
And if for cold it hap to die,
We'll bury it in a Christmas pie
And everymore be merry. —*George Wither.*

FIRST of all ceremonial Christmas dishes comes the Boar's Head. In olden times it appeared in the baronial halls and country mansions. Beautifully decorated and garlanded, it was carried into the banquet-hall on a dish of silver, or gold, heralded by a flourish of trumpets and strains of merry minstrelsy. As the sewer (waiter) approached the table to set it before the host, he sang a carol of three verses, beginning

"*Caput apri defero*
Reddens laudes Domino.
The boar's head in hand bring I,
With garlands gay and rosemary,
I pray you all sing merrily."

Today, the Boar's Head is chiefly served in colleges, clubs and entertainments of the great companies. It is particularly honored at Queen's College, Oxford.

Next in importance to the Boar's Head in past centuries came the Peacock, "the food of lovers and the meat of lords." First the skin was carefully stripped off, the bird stuffed with a fine dressing flavored with spices and sweet herbs, roasted and then sewed up again in its feathers. The beak was gilded and a piece of cotton dipped in spirits placed in the beak and ignited as the bird was brought to the table on an elaborate pastry tart of huge size. The honor of bringing it in was given to the most distinguished lady, who, accompanied by minstrels, set it before the master of the house.

In America the Christmas turkey is the dish of honor. For many years Rhode Island has supplied the President of the United States with the turkey for the White House dinner.

Plum Pudding was originally called Plum Porridge and was the first course at a Christmas dinner. It was made by boiling beef, or mutton, with broth thickened with brown bread and lavishly sprinkled with raisins, currants, prunes and spices. Later it was made of flour, chopped suet, eggs, raisins, currants, candied peel, and spices, and boiled in a cloth. This Christmas pudding was not called Plum Pudding until the time of Charles II. Formerly it seems to have been known as hackin, in reference to the chopped, or hacked, ingredients.

Originally the Christmas Pie was a huge affair. The pastry was in the form of a cradle, or manger. An old traveller wrote "Every family against Christmas makes a famous Pye which they call Christmas Pye. It is a great nostrum, the composition of this pastry. It is a most learned mixture of neat's tongues, chicken, eggs, sugar, raisins, lemon and orange peel and various kinds of spicery."

At a later period they were made in small narrow shapes and also round.

The mince-pie is supposed to symbolize by its ingredients the various offerings brought by the Wise Men to the Holy Child. John Bunyan was one of the strict Puritans who would not eat mince-pies in the days of the Commonwealth when they were considered to savor of heathen ideas.

Every country, too, makes a marchpane, marzipan, or marzapan, a mixture of almond paste and sugar.

The famous drink of the season was the wassail-bowl, named for the Saxon "*was haile,*" meaning "Here's to you!" The mixture, served in a large punch bowl of gold, silver, porcelain, or wood (the mazer) in olden times, was a rich wine spiced, sweetened, and with roasted apples floating on the top, reminding us of Shakespeare's line, "When roasted crabs hiss in the bowl."

"It is," says Leigh Hunt, "a good-natured bowl and accommodates itself to the means of all classes, rich or poor. You may have it of the costliest wine, or the humblest malt liquor. But in no case must the roasted apples be forgotten. They are the *sine quâ non* (meaning the essential necessary ingredient) of the wassail-bowl. Our ancestors gave them the name of lamb's wool."

The wassail-bowl survived in this country in the famous "apple-toddy" of Colonial homes. It is still made today by Southerners of Colonial ancestry. Eggnogg is also a famous Christmas offering to guests in Southern homes. It is composed according to time-honored recipes, with eggs, sherry and nutmeg.

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The Story of Christmas

By FRANCIS LORING PYNE

MENTOR GRAVURES

THE NIGHT
By Correggio

THE ADORATION OF THE MAGI
By Peter Paul Rubens

MIDNIGHT MASS ON CHRISTMAS EVE IN ALSACE
By P. Hey

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THE NATIVITY—By W. L. Taylor

MENTOR GRAVURES

CHRISTMAS BELLS
By E. H. Blashfield

HAULING IN THE CHRISTMAS TREE
By R. Swain Gifford

THE GODDESS OF OUR KITCHEN
By F. S. Church

CHRISTMAS is, like one of its own plum-puddings, an amalgamation of many ingredients. It is a festival that has been sinking deeper and deeper into the heart of man for many hundred years. Some of the customs and emblems that we follow so unquestionably from year to year have their origins in ancient pagan rites. We do not stop to ask *why* we hang up wreaths of holly and suspend the mistletoe bough. It is a part of Christmas to do this; and we do it lovingly.

Christmas coincides with the winter solstice, or the turning-point of the sun and the lengthening of the day. As far as history can carry us we find early races holding a Midwinter Festival and rejoicing in the birth of the New Year. A very, very long time ago man discovered that the Sun, which he worshipped as a personality and the source of warmth, light and fertility, had a birthday, and that it came nearest to the earth when the days were shortest. When man wanted light and warmth for himself, he made a fire; and to his mind *fire* was an emblem of the Sun. Sun-worship and Fire-worship were closely related. Northern races called the Sun the Fire-wheel and lighted fires to the Sun-god when he was farthest away in Midsummer and when he was nearest in Midwinter. This sacred fire in the winter season was kindled indoors. *It was the*

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Yule Log! This Midwinter Festival was kept everywhere by special religious ceremonies and general rejoicing. Everything that was done at this season was either a religious symbol, or was intended for a charm to bring about prosperity, fertility and increase during the coming year. Animals were sacrificed, blood was sprinkled, trees were beaten, straw and grain from the last year's harvest were laid on the ground and in the nests of the fowls, crumbs from the festival-loaf were scattered over the fields, and various offerings were made to the gods and goddesses. Temples and houses were decked with green boughs, logs were kindled, candles were lit, and many special dishes, cakes and drinks were prepared.

JOURNEY OF THE THREE KINGS—By Benozzo Gozzoli
From a fresco painting in the Riccardi Palace in Florence

While these and other primitive observances were taking place year after year and century after century in Darkest Europe, the Romans had been celebrating for five hundred years before the birth of Christ their Midwinter Festival, the Saturnalia, commemorating the equality supposed to have existed on earth in the golden reign of Saturn. The Saturnalia was a period of general merry-making and relaxation. People gave each other presents, went about masquerading in fantastic garb, and wished each other "Io Saturnalia," which meant about the same thing as "Merry Christmas."

The little band of early Christians, who often celebrated their own rites beneath garlands and other decorations of the Saturnalia, displayed for the purpose of safety, had not the power to combat such long established practices. Consequently, they absorbed some of them. And, as Christianity spread from Rome throughout Europe, the missionaries found it impossible to crush deeply-rooted observances. Consequently, to the number of Christmas customs that came from the Saturnalia of the highly civilized Romans, gradually were added rites and customs with which the ancient Germanic tribes, the Scandinavians, the Gauls, the Celts and the ancient Britons celebrated the beginning of their New Year.

"Thus," says a modern writer, "all the pagan winter festivals were transmuted and sanctified by the Christian Church into the beautiful

festival that keeps the world's heart young and human. The Church also brought from the ancient observances a number of lovable customs, such as the giving of presents, the lighting of candles, the burning of the Yule Log, the Boar's Head, the Christmas Tree, the mistletoe, the holly, laurel and other greens, and the mince-pies."

The Hallowed Season

We regard Christmas as the most hallowed season of the year, the season of beauty and bounty, the season of love and charity, the season of gentle thoughts and tender greetings, the season when we pause to listen to the choir invisible singing "Peace on Earth, Good Will toward Men."

CHRISTMAS MORNING
From a drawing by A. Forestier

"Noël, Noël, the sacred strain
From heavenly voice and viol rings,
And lo! the children's window pane
Is curtained by angelic wings."

How beautifully Washington Irving writes:

"Of all the old festivals, that of Christmas awakens the strongest and most heartfelt associations.

"It is a beautiful arrangement, derived from days of yore, that this festival, which commemorates the announcement of the religion of peace and love, has been made the season for gathering together of family connections, and drawing closer again those bonds of kindred hearts which the cares and pleasures and sorrows of the world are continually operating to cast loose; of calling back the children of a family who have launched forth in life and wandered widely asunder, once more to assemble about the paternal hearth, that rallying place of the affections, there to grow young and loving again among the enduring mementoes of childhood."

Christmas Holly, Mistletoe and Tree

At a season when everything was chosen to commemorate, or invoke, the spirit of growth and fertility, the holly, mistletoe and ivy, which bear fruit in the winter, became particularly precious. Beautiful, cheerful holly, with its glossy, prickly leaves and coral berries, was a sacred plant

in the childhood of the world. We may make garlands of laurel or bayleaves, ropes of crowsfoot or smilax, and bring into our rooms bunches and pots of poinsettia, but nothing ever takes, or will take, the place of holly in our affections. In our literature its place is high and honored. All the old carols seem to be wreathed with it. It adorns all our Christmas pictures, and it appears on our Christmas cards. It symbolizes the spirit of Christmas.

HOSANNA!
A reproduction of one of Birket Foster's illustrations of Milton's Hymn on the Nativity

In some old English carols holly and ivy are curiously associated. They often appear as personalities contesting for the mastery, Holly being the man and Ivy, the woman.

Ivy has never been a Christmas plant in our country; but in England, where it gracefully clothes all old buildings with a lustrous garment of dark green, it is easy to realize that ivy is a part of life and an inspirer of sentiment. Next to holly we love the mistletoe, with its waxen berries of greenish white. For some strange reason mistletoe has never been used as a church decoration. York Minster is the only place where it is allowed.

The mistletoe, the "all-healer," is a mysterious plant. It was so sacred to the Druids that it was never allowed to touch the ground. At the New Year the high priest cut it from the oak with a golden sickle, while other priests held a white cloth to receive it as it fell. Even today we do not like the mistletoe bough to fall. We say "it is unlucky"; but somehow, far back in the unconscious inherited memory of thousands of years, we keep alight the spark of reverence for the Golden Bough. The Welsh call the mistletoe the "tree of pure gold." The sun's golden fire was believed to be an emanation from the mistletoe, and in it the life of the oak was thought to reside. Today very little mistletoe is found on the oak. The strange parasite prefers the apple-orchard. Its supposed marvellous powers of healing sickness and averting misfortune and its influence in promoting fertility and prosperity made the mistletoe a magical plant, beloved and reverenced alike in farmhouse, manor, baronial hall and castle. From the fact that it was dedicated to the Northern

CHRISTMAS CAROLS IN ENGLAND
Drawing by Birket Foster

Goddess of Love, the idea of kissing under the mistletoe bough was undoubtedly derived.

The presence of the Christmas Tree in the house is not so old. It did not become general until the nineteenth century. Germany claims the Christmas Tree; but there is no recorded instance of the use of the Christmas Tree in Germany before the seventeenth century. The origin of the Christmas Tree is obscure. Even its symbolism is a matter of conjecture. Dr. Alexander Tille thinks it came from a union of two elements: the old Roman custom of decorating houses with laurels and green trees at the Kalends of January and the popular belief that every Christmas Eve apple and other trees blossomed and bore fruit. Others consider it emblematical of Christ, who was often regarded as the "Tree of Paradise." In some of the early Christmas plays a Tree of Paradise—a juniper, adorned with ribbons and apples—was introduced. "The thought of Him," says Clement A. Miles, "as both the Light of the World and the Tree of Life may at least have given a Christmas meaning to the light-bearing tree and helped to establish its popularity among pious folk."

THE LIGHT OF THE WORLD

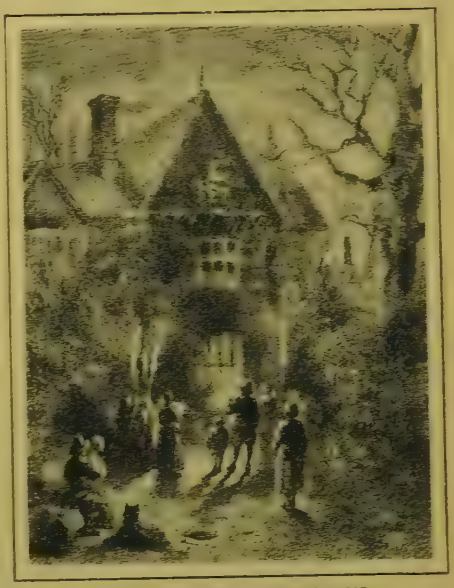
Reproduced from a painting, bearing no artist's name. The subject is most striking. The faces of modern children gaze down upon The Light of the World as it shines up from the manger

Authorities agree that the first record of a Christmas Tree comes from Alsace in 1604. An old writer, describing Strasburg, says: "At Christmas a fir tree is put into the room, and upon it are hung roses made of colored paper, apples, wafers, tinsel, and sweetmeats. Usually a square frame is made around it."

Another glimpse of this Alsatian custom we get from the Baroness Oberkirch, about 1781. "We passed the winter at Strasburg," she writes, "and at Noël we went, according to custom, to the *Christkindelsmarkt*. This bazaar is held for children for a week before Christmas till midnight. The great day arrives. They arrange in each house a *Tannenbaum*, a pine covered with candles and bonbons with a great illumination awaiting the visit of *Christkindel* (the little Jesus), who will reward the good children; but they fear *Hanstrapp*, who will hunt for and punish bad children."

In Berlin the tree is traced to about 1780; Goethe saw one for the first time in Leipsic, in 1793; in Hamburg it first appears in 1796; and

in the nineteenth century it was carried to all parts of Germany.



CHRISTMAS IN OLD ENGLAND
From a drawing by F. O. C. Darley

Christmas Service: Midnight Mass, Hymns, Carols and Crib

Christmas would not be Christmas, even to the unbeliever, without the beautiful stories that cluster around the birth of the Holy Child—the Shepherds keeping watch over their flocks by night; the singing of the Angels; the strange, luminous Star that guided the Three Magi to the manger; and the hush and solemnity that pervaded all nature when the Light of the World came into being.

One of the beautiful customs of Christmas is the Midnight Mass, which was introduced in the fifth century. All over the world this is celebrated. "Few rites," says a modern author, "are more impressive than this Midnight Mass, especially in country places. Through the darkness and cold of a winter's night, often for long distances, the faithful journey to worship the Holy Child in the splendor of the lighted church. It is a reënactment of the visit of the Shepherds to the cave at Bethlehem, aglow with supernatural light."

The Midnight Mass is just as impressive in the cathedrals and churches of the large cities. At this mass is always heard the favorite Christmas hymn, "*Adeste fidelis*" (O Come All Ye Faithful), composed in France about 1700. From the fact that it was sung in the Portuguese Embassy in London in 1797, it is also called the "Portuguese Hymn." Many are the Christmas hymns that are dear to our memories: "Brightest and Best of the Sons of the Morning," "It Came upon the Midnight Clear," "While Shepherds Watched their Flocks by Night," etc.

BRINGING IN THE BOAR'S HEAD
A Christmas custom of the olden time

The carol has more of a poetic than an actual significance to us. We go to concerts to hear carols. We do not sing them ourselves. We do not burst into carols at the appearance of the plum-pudding adorned with holly and burning with Yule fire; the beautifully browned and crisp Christmas

turkey stuffed with chestnuts, or oysters, is welcomed with no part-song of uncertain intonation and wavering rhythms; the mince-pie is not greeted with an ancient "Nowell! Nowell! Nowell!" We prefer to hear our Christmas music beautifully rendered; and as a part of the tribute we pay to Christmas we gratefully listen to the special music that churches provide at this season, and we buy tickets for Handel's "Messiah." We also buy books of carols and anthologies of Christmas poetry. The carol is kept alive in our *minds* rather than in our *voices*.

CHRISTMAS SINGERS IN OLD ENGLAND
Drawn by Birket Foster
"Give way, give way ye gates."

The arrangement of a realistic manger is an old and picturesque custom.

This material representation of the manger is today in Italy and Spain what the Christmas Log is to England, France, the Southern Slavonic countries, and what the Christmas Tree is to Germany.

DRAGGING IN THE YULE LOG

THE CEREMONY OF THE BOAR'S HEAD

Christmas Legends

On this night when, according to ancient belief, the New Year began by the sun turning on its course, for one brief moment the sun was supposed to stand still. It was a wonderful, strange and weird instant. Mountains opened and revealed their treasures, water of the springs turned to wine, and strange things happened. The Christian legends are still more wonderful. On this Holy Night sunken bells rang, caverns were lighted mysteriously, bees sang, cattle knelt in their stables in memory of the cattle at the manger; sheep walked in procession in commemoration of the glad tidings to the Shepherds; and cocks crowed all night long to scare away the evil spirits.

In addition to the above superstitions, horses were supposed to be endowed with human speech for an hour, and plants blossomed for the same

period. Legendary blossoming trees are many; but the most famous of all is that of the "Glastonbury Thorn." In the old Abbey of Glastonbury in England, Joseph of Arimathea planted his staff and, the legend goes, it took root and always blossomed at Christmas. Any cutting from it possessed the same miraculous power. In the reign of Charles I the custom still existed of persons going in stately procession on Christmas Day to Glastonbury to cut a branch of the sacred hawthorn and bring it to the King. Cromwell's soldiers burned the Abbey, and the bush perished.

A CHRISTMAS EVE SCENE
Specially interesting as picturing the home of the poet Wordsworth — Rydal Mount. He wrote a Christmas sonnet here

Two lovely flower legends are associated with the manger. In France they say that the lucerne (Saint Foin, or Holy Hay) burst into blossom for the first time around the head of the Holy Child, who had no pillow but this. The other is of the Christmas Rose, also called the black hellebore, a wax-like flower with pink-tipped petals. The story goes that a shepherdess stood by the sleeping Child, looking at the rich offerings the Three Magi had left and wishing that she, too, had a gift for the Christ Child. An Angel, seeing her distress, stopped, and, brushing aside the snow, showed her these flowers, saying: "Nor gold, nor myrrh, nor yet frankincense are offerings more mete for the Christ Child than these pure winter roses."

Of all Christmas legends the most thrilling is that of the Three Wise Men, or Magi, who came out of the mysterious East following the Star of Bethlehem. Melchoir, King of Nubia, the smallest, brought a gift of gold; Balthazar, King of Chaldea, of ordinary stature, brought frankincense; and Jasper, King of Tarshish, "a black Ethiope," a very tall man, brought myrrh. They came with many rich ornaments belonging to kings, and also with mules, camels and horses loaded with great treasure, and with multitudes of people to do homage to the Christ Child, an infant of thirteen days, lying in a lowly bed in the manger of a stable!

THE MISTLETOE DANCE
By Birket Foster

Melchoir's gold typified the royalty of the promised King of the Jews; Balthazar's frankincense, the divinity; and Jasper's myrrh, the sorrows.

The barbaric splendor of these mysterious Kings of the East made

their visit a favorite subject with the great painters of the Middle Ages and of the Renaissance. Great lords liked to pose in the costumes of the Kings, and many pictures of the Adoration of the Magi are portraits. In one of Botticelli's, for instance, nearly the whole Medici family is represented. The costume of the rustic Shepherds made no such appeal; and, consequently, there are few Adorations of the Shepherds by the Great Masters in comparison with Adoration of the Magi.

BRINGING IN THE CHRISTMAS TREE
By R. Caton Woodville

Christmas Observances

Of the many names that Christmas has in other countries, the word Yule* is the only one that we have adopted. We rarely use the French *Noël;* we never use the German *Weinachten. Yule*, we employ in a poetical sense and in combination with another word. We light the Yule Candles, we burn the Yule Log, and, sometimes, we write a "Happy Yuletide"; but we invite our friends to a Christmas dinner and we wish them a "Merry Christmas." We do not keep "Yule." *Yule* brings no picture to our minds.

But ancient Yule is not yet extinct. The Boar's Head is a survival of the Yule Boar of Scandinavia. In very ancient times a real boar was sacrificed at Yule. Later, in certain places, there was a custom of dressing up a man in skins to represent the Boar, and he was attacked by an old woman with blackened face who pretended to sacrifice him. In some northern countries today a little pig is roasted whole and served on the table under the name of the Christmas Boar. In Sweden and Denmark the people bake a loaf in the form of a "boar-pig," which they call the Yule Boar. This stands on the table all through Yule, and, as superstition connects it with wheat, some crumbs are kept until sowing-time and mixed with the grains of

"'TWAS THE NIGHT BEFORE CHRISTMAS"
One of F. O. C. Darley's pictures made for an early illustrated edition of Clement Moore's popular Christmas poem

*"The Saxons and Northerns kept a feast in honor of Thor and called it the Mother Night, as the parent of other nights; also Midwinter. It was likewise called Gule, Gwyl, Yule, or Iul, and half a dozen similar names, respecting the meaning of which learned antiquaries differ, Gebelin and others stating they convey the idea of revolution, or wheel, while others, equally learned, consider the meaning to be festival, or holy day, Gwyl in Welsh and Geol in Saxon, both signifying a holy day; and as Yule or Iul also signifies ale, an indispensable accompaniment of Saxon and British feasts, they were probably convertible terms. The word Yule may be found in many ancient metrical romances, and some of the old mysteries as applied to Christmas, and is still so used in Scotland and parts of England."

seed. In some countries of England a pastry pig filled with mince-meat is called the Christmas Pig. It is, of course, a survival of the Yule Boar.

Naturally, olden customs linger longest in rural districts; but in every country we find the Midwinter Festival one of religion and merrymaking. The Slavs of Southern Europe still light their Christmas Log and prepare their ceremonial dishes, simple as they may be. In Mediterranean countries the crib, or *presepio*, is universal, from the elaborately arranged composition that resembles the pictures of the old Italian masters of the Nativity and the visit of the Three Kings to the simple china, or sugar figures that are erected in humble homes. In Germany the tree stands for the symbol of Christmas. In England plum pudding, mince-pie and boar's head stand out conspicuously. The dish that graces our feast is the Christmas turkey. To us the holly speaks eloquently of the season. In all countries, the Christmas Eve supper and the Christmas dinner are the great feasts of the year.

BUYING CHRISTMAS GREENS IN PARIS
From a drawing by Francis Garat

CHRISTMAS EVE IN PARIS
From a drawing by André Castaigne

Children's Day

Christmas is particularly the Children's Day. Everything about it appeals to them; and only he that becomes a child in spirit can enjoy Christmas in the fullest sense. The giving and receiving of presents forms no little part of the pleasure of the season; and no little part of that pleasure dwells in the mystery and surprise with which "Christmas secrets" are kept.

Every country has a mysterious visitor in whom the children believe. It may be Father Christmas, Bonhomme Noël, the Christ Child, Kriss Kringle, Rupert, Saint Nicholas or Santa Claus, or that strange woman, Befana, who distributes her gifts in Italy on Twelfth Night, or Epiphany, whence her name. In some countries

CHRISTMAS IN THE SOUTH
From a drawing by E. D. Stevens

the children hang up their stockings; in others they place their shoes by the chimney for the unseen guest to fill at the midnight hour. Throughout the length and breadth of the United States our Saint Nicholas comes a yearly visitor. Our Saint Nicholas is a creation of our own. He first appeared in the poem of "A Visit from Saint Nicholas," written in 1822, by Clement C. Moore of New York, who transformed the austere Dutch Saint Nicholas into the lovable little dwarf who comes out of the mysterious snow-bound north in "a miniature sleigh drawn by eight tiny reindeer," to bring gifts and joy to all and each alike. The Midwinter visitor of all other countries will leave a switch, or a piece of coal, or a heap of ashes in the shoe, or stocking, of the undeserving child; but our "Saint Nick," beloved now for three quarters of a century, keeps no Recording Angel. He is the personification of the spirit of loving and giving, and will make no child so cruelly unhappy by disappointment and humiliation at such a time. Our Saint Nicholas is also a saint of charity. He loves to visit the poor and lowly. He joyfully tumbles out of his pack dinners and gifts and trees for unfortunate, homeless children and for those who sadly have to work for their living. His lavishness is inexhaustible; his bounty falls on the earth like the gentle rain from heaven, and like that rain, is "twice blessed."

This personality of Saint Nicholas—this personification of the hallowed and gracious time—is our American gift to the poetry and folk-lore of Christmastide; and to us, who love our good-natured and jolly little Saint Nicholas, it does not seem a small contribution.

CUTTING MISTLETOE IN THE SOUTH
From a drawing by Thomas Nast

SUPPLEMENTARY READING

CHRISTMAS—Its Origin, Celebration and Significance as Related in Prose and Verse
Edited by R. H. Schauffler

THE SPIRIT OF CHRISTMAS
By Henry Van Dyke

CHRISTMAS IN LEGEND AND STORY
Compiled by Eva S. Smith and Alice I. Hazeltine

CHRISTMAS IN RITUAL AND TRADITION
By Clement A. Miles

*** Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

In the midst of the hideous clangor of war, is there a chance for the Christmas carol? While the roar of the "Busy Berthas" and the long "75's" rend the air, can the voice of Tiny Tim be heard crying, "God bless us every one"? When the airmen whirl through the sky do they hear echoes of the "music sweet that never was by mortal fingers struck"? When the searchlights sweep the heavens do they find there any trace of the Star of Bethlehem? Has the Prince of Peace no place?

★ ★ ★

Millions now forego the holly and mistletoe to face shrapnel and shell and poison gases. At home the Christmas bells are ringing, "Peace on Earth, Good Will to Men." *Out there* the men are fighting, bleeding, dying, that peace for all mankind may be assured. The world war of today is not for conquest, but rather to conquer the spirit of conquest and to enforce the principles of enduring peace. In a world where conflict has marked the course of existence from the beginning, and the law of the survival of the strongest has cruelly determined the destinies of nations, permanent peace for all mankind must be bought at a terrible price. Its message is not borne to the doors of the nations by the dove with the olive branch, but voiced sternly from the mouth of the cannon.

One hundred years from now the people of the earth will read the history of our time and exclaim: "Oh the wonder of the age and the day when the Peace of all Nations, the blessings of which we now enjoy, was finally achieved! Out of the most awful war in the history of the world emerged the principles that ended war."

★ ★ ★

Is it too much to expect that it shall so be written in history, and that the people of the coming century shall lay their laurels and their blessings on the heads of the millions that are now *out there*—declaring that "these dead shall not have died in vain . . . and that government of the people, by the people, for the people, shall not perish from the earth"?

★ ★ ★

That is our Christmas thought, and it is inspired by the faith that though the world is today ablaze with war, these very flames are at work in the cause of humanity. The old order changeth, and we look forward to the dawn of the day when the message of Peace and Good Will shall be heard throughout the world, and the spirit of human fellowship shall prevail in the affairs of mankind.

W. D. Moffat

EDITOR

Christmas Bells

☆ ☆ ☆

Ring out the old, ring in the new,
Ring, happy bells, across the snow;
The year is going, let him go;
Ring out the false, ring in the true.

Ring out the grief that saps the mind,
For those that here we see no more;
Ring out the feud of rich and poor,
Ring in redress to all mankind.

Ring out a slowly dying cause,
And ancient forms of party strife;
Ring in the nobler modes of life,
With sweeter manners, purer laws.

Ring out old shapes of foul disease;
Ring out the narrowing lust of gold;
Ring out the thousand wars of old,
Ring in the thousand years of peace.

—TENNYSON

IN THE LOUVRE, PARIS

THE SHEPHERD. By Jean-Baptiste Corot

ONE

THE art of landscape painting is not merely to represent an attractive little piece of country, or a bold, splendid scene in Nature. The landscape painter must paint *light* and *air;* he must give the idea of sunshine; of dew on the trees, and grass; of coming storms; and of the gentle breeze, or of the roaring wind. In short, he has to capture and fix upon his canvas *atmospheric effects*. First, the landscape painter has to be a good draughtsman; next, he has to be a good colorist; he must be able to suggest *light* and *air*, and his pictures must have *feeling*. The artist must put in something of the emotion he felt while observing the real view. This must have been done so well, too, that you must catch that feeling. His picture must arouse in you a new interest for all such scenes as it represents. A good landscape, in fact, shows us *how to look at the country*.

Sometimes painters concentrate the interest in the background; sometimes in the foreground, and sometimes in the "middle distance," which lies between these. As a rule, this "middle distance" is broken, so that the spectator may look far away into the distant "perspective."

Painters do not always choose what the public calls a "beautiful," or even an "interesting" scene. Some, indeed, delight in selecting a dreary waste of land broken by pools of water; a rough, lonely country road; a long stretch of sand-dunes with a few straggling trees in the distance; or a jumbled up mass of rocks by the sea. Perhaps at first glance we wonder why such a subject appealed to the painter. We look again, and with more attention; and now we find out what it was that he took such pleasure in painting. We see lovely reflections from a radiant winter sky in the cold pools fringed with frozen grass; we see lilac shadows passing across the yellow dunes and note that the straggling trees are being blown by a fresh wind from the invisible ocean; and we see that the rocks that we first thought brown are wet with salt spray, and that iridescent hues play on their shining surfaces; and that the mass of rocks is broken here and there to give the glimpses of the dark, blue sea heaving gently in the sunny background.

Beautiful landscapes appear in many pictures of the early Italian and Flemish masters, but they are subordinate to the figures, or to the story the painter tells. Titian (tish'-an) (1477-1576), produced landscapes showing nature in so many moods that he is considered the forerunner of all landscape artists.

The first great painter of light was Claude Lorrain (1600-1682), who painted in and around Rome. Although his pictures have classical and scriptural titles, the interest centers in the landscape.

Meanwhile the Dutch were turning their thoughts to landscape. Jan van Goyen (1596-1656) was distinguished for his river and canal scenes with a delicate feeling for light and color; Jan Wynants (1615-1679) made clear, bright landscapes famed for aërial perspectives; Paul Potter (1625-1654) and Albert Cuyp (1605-1691), called the "Dutch Claude" because of his golden light, were doubly famed for the meadows in which their animals graze; Rembrandt (1607-1669) delighted in canals with bridges, huts, haystacks, windmills, or a path losing itself in a field; Jacob van Ruysdael (rize'-dale) (1625-1682), the greatest Dutch landscape painter, painted hills covered with heather, stagnant pools, windmills, water-mills, thick woods, waterfalls roaring through dark pines, sand-dunes and broad, sunny meadows; and Hobbema (1638-1709) painted like Ruysdael, but with a more sunny spirit.

The great traditions of Dutch landscape art are continued in our day by Anton Mauve (1838-1888), who found delicate tranquil beauty everywhere; and the brothers James and William Mavis. The first English artist to find inspiration in that beautiful country was Gainsborough (1727-1788). His landscapes were little appreciated in his day, but they are highly valued now.

John Constable (1776-1837) was the first to paint the dewy beauty of his country. His influence upon Corot and the other Barbizon painters was immense.

Contemporary with Constable was J. M. W. Turner (1775-1851), who united the Classic and Naturalistic Schools and covered every style of landscape art. *Crossing the Brook* in the National Gallery (London) is one of the greatest of all landscapes. Turner treated light with the same joy that Claude Lorrain had done before him and that Claude Monet (Moe'-nay) was to do after him.

Landscape art received a great impetus in the nineteenth century from the group of painters: Corot (1796-1875), Millet (1814-1875), Rousseau (1812-1867), and others of the Barbizon school, who expressed Nature's moods and used Nature to express their own moods. Many American artists were inspired by them and later by the impressionists, who, led by Claude Monet (1840), Alfred Sisley (1840-1899), Paul Cezanne (1839), and Camille Pissaro (1830-1903), have carried light, color and atmosphere still farther.

Landscape was early followed for its own sake by American painters. Thomas Cole (1801-1848), Thomas Doughty (1793-1856), Asher B. Durand (1796-1886) and J. F. Kensett (1818-1872) painted scenery on the Hudson and in the Catskills, founding the "Hudson River School."

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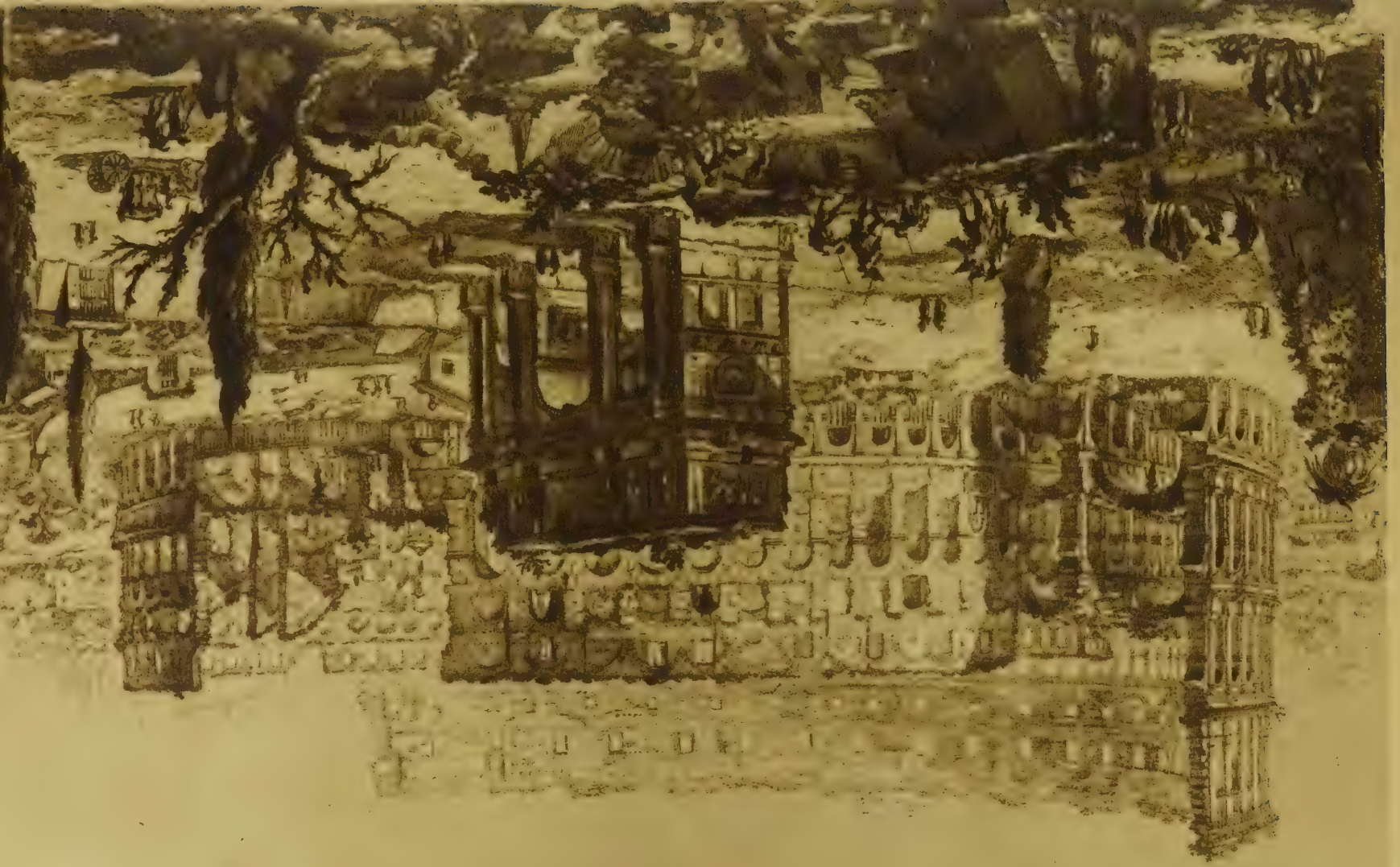

IN the seventeenth century artists had a great fancy for painting the ruins of ancient architecture in Rome and its vicinity. If the fashion was not actually set by Claude Lorrain, this French painter increased the popularity of picturesque ruins. Two Italian artists, G. P. Pannini (pan-nee'-nee) and Marco Ricci (rich-ee), helped carry the taste into France and England; but a force greater than these men was Piranesi (peer-ah-naze'-ee), the pupil of Ricci.

Giambattista (jam-bat-tees'-tah) Piranesi (1720-1778), called the "Rembrandt of Architecture," took a passionate interest in the crumbling monuments of Rome, and set himself the task of preserving the forms of the buildings that were left. As architect, his trained eye could appreciate this beauty, and as artist, his skilled hand was able to reproduce what his eye saw. Piranesi etched about 2,000 plates, most of them architectural. "He was less happy," writes a critic, "with well-repaired churches and palaces than with ruins, or with the creations of his own fancy. He loved to enhance the majesty of the crumbling baths and temples by stretching back their pillars to an immeasurable distance while he marked their age by festooning them with strange sea-weed-like foliage. It was also his habit to emphasize their hugeness and stability by the contrast of beggars dancing, or gesticulating, under the immense vaults and crag-like columns." Prints of his copper plates were bought by travelers in Rome, and soon became popular throughout Europe.

In the works of Gentile Bellini (zshon'-teel bel-lee'-nee) (1427-1507) architecture is something more than mere background; for the Venetialn scenes and scenes of Constantinople (which he visited) show that his brush delighted to depict the bridges and buildings that rejoiced his eyes.

Antonio Canal (1697-1768) called Canaletto, painted palaces, squares, canals and churches of Venice so well that he is considered an *architectural* painter. Visiting England, he painted views of London, and a famous one of Eton College (1746) now in the National Gallery (London). He is sometimes confused with his nephew, Bernardo Bellotto (1724-1780), also called Canaletto, and also a painter of architectural and perspective views of Venice.

Another *architectural* painter, Francesco Guardi (fran-chess'-ko gwar'-dee) (1712-1793), painted very similarly to the first Canaletto, of whom he was a pupil, but with more color and less truthfulness to detail. The works of all three artists are of great value to-day.

The early Dutch masters also loved architecture; but when we reach Rembrandt (1607-1669), we find something new, —love of dark shadows and misty backgrounds,—and the strange light that falls from unseen domes and windows. Before his time the two Hendricks Van Steenwyck, father and son, were successful painters of buildings, showing the *interiors* of churches, with their vanishing perspectives and rich ornamental details, fine hanging lamps, carved altar rails, and even tiny votive pictures on the walls.

Peter Neefs (1578-1656), continued the same architectural style, sometimes adding a torchlight illumination to increase the effect.

Jacob Berckheyde (1630-1693) and Emanuel de Witte (1607-1692) painted interiors of the whitewashed Reformed churches with the light streaming through high glass windows and worshippers filling the nave and aisles.

Jan van der Heyden (1637-1712), devoted himself to exteriors, in which he depicts every stone in a wall, every tile on a roof, every paving stone in a street, every leaf on a tree, and gives faithful views of Dutch towns, market-places, gardens, little red houses with crow-stepped roofs, —all pleasing in color and finished like miniatures.

More artistic is Pieter de Hooch (1632-1681), who, although painter of domestic scenes, has a great feeling for architecture. The courtyards of his Dutch houses are lovely, with their red bricks, tiles, arches, and portions around which light and air circulate freely.

In modern times, perhaps, J. L. Gerome (1824-1904) stands first as painter of architecture, particularly mosques, both within and without. It is natural in this day of "globe-trotters" that painters should render the great buildings of the world. American, French and English artists have accomplished splendid work in this field. Colin Campbell Cooper, a New York artist, has achieved particular distinction in depicting the buildings of New York as well as of India.

Perhaps the greatest triumph of modern architectural painting has been accomplished by Claude Monet, who although preëminently a landscape painter, added to his fame by his series of the façade of Rouen Cathedral, depicted under various atmospheric effects and at different times of day and night.

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IN LUXEMBOURG GALLERY PARIS

PORTRAIT OF THE ARTIST'S MOTHER. By James Abbott McNeill Whistler

WHAT constitutes a good portrait? Is it satisfactory because the artist has caught the likeness of his sitter, or is it because he has caught his personality? Great portrait painters are able to comprehend and fix *both*. Those masters of past centuries did this so well that we, who cannot see the originals, feel at once what kind of individuals they were. Great portrait painters of the past were also skilled in depicting costume and all its accessories. They made very real the glint of armor, the sheen of silk, the bloom of velvet, the waving fronds of feathers, the sparkle of jewels, and the texture of cloth, felt, linen or lace. They knew, too, how to make a person look through his or her eyes; they knew how to vitalize their sitters. They also knew how to paint *hands*—the hands of the delicate, aristocratic lady toying with her fan, or idly touching some fruit in a basket by her side (and what fruit!), or those of the cavalier playing with his lace cravat, or holding his embroidered gloves, the hands of the sturdy Dutch housewife folded over her Bible with the silver clasps; the hands of the dominie and bishop accustomed to the attitudes of prayer and benediction. Splendidly did they paint children—children dressed in the miniature costume of their elders—playing with dogs, parrots and kittens. They painted men and women at banquets; men at council-tables; men drilling or returning from their guilds or companies.

All the great painters were great portraiturists, and, in fact, they earned the greater part of their income by this means. Competition made it imperative that they should place on their canvas the likeness and the personality first of all.

It is fortunate for us that people liked to be represented in their everyday costume; for nothing now tells us so much about the clothes our ancestors wore as old portraits. Some of the best modern works show men and women in their street clothes, rich evening dress, riding habits, or even their golf outfits. Of course, there were painters who liked to represent their sitters as nymphs and goddesses, just as to-day some painters like to dress their subjects up in some of their studio paraphernalia; but in the main, the most successful portraits are the most natural ones.

Portrait painting became an independent artists' work in the fifteenth century. The Flemish painters, Jan Van Eyck and Memling, produced many portraits of extraordinary vigor. They caught likenesses and represented personality. Dürer, too understood the art of portraiture. His people still live.

The earliest Italian masters were Gentile and Giovanni Bellini. Gentile's portrait of the Sultan Mahomet II, which he painted in Constantinople, and Giovanni's *Doge Loredano* stand at the head of a long line of marvelous Italian works. All the Italian masters excelled in portraiture. Perhaps the most famous portrait in the world is Leonardo da Vinci's *Mona Lisa*—his lady of dreams with the enchanting smile. He also painted others of power and vital beauty. Raphael was a noted portrait painter. Nothing surpasses his work. What a long list! Titian's list, too, is long, and some of them stand among the greatest portraits ever produced. Moroni, whose picture of the tailor is so famous, painted splendidly.

Holbein was another great master. His Erasmus is one of the greatest of portraits. Holbein painted nearly every important person at the English Court, just as the Clouets (kloo'-ay) did in the French Court.

The list of Flemish and Dutch painters is immense. At the head of the group stands Rembrandt, and not far below him comes Frans Hals. Both of these masters caught the *character* and the *personality* of their sitters; and their skill was almost superhuman. A few strokes of the brush—and there was a filmy ruff, cobweb lace, a sparkling jewel, a cloth jerkin, a silken dress, or a piercing eye!

Of a different type were Rubens and his pupil, Anthony Van Dyck. Great was their skill. Who does not know the Rubens' portraits, and the pictures that Van Dyck left of Charles I and his lovely children?

Velasquez was another supreme master who represented personality as well as likeness. How vital are his kings and grandees of Spain, his maids of honor, his dwarfs and jesters, his little infantas and his Balthazar Carlos on his prancing horse!

Famed for grace and elegance and beautiful color are Sir Joshua Reynolds (1723-1792) and Thomas Gainsborough (1727-1788). Not far below them are George Romney (1734-1802) and the Scotchman, Raeburn (1756-1823).

The American portrait painters of the eighteenth century take high rank even with such rivals as Reynolds and Gainsborough. John Singleton Copley (1737-1815), John Trumbull (1756-1843), Gilbert Stuart (1775-1828), and Thomas Sully (1783-1872) are appreciated by connoisseurs on both sides of the ocean.

Some of the most celebrated portrait painters of the present age are natives of the United States. The portraits of James A. McNeill Whistler (1834-1903) and John S. Sargent (1856) are valued beyond all others. Those by John W. Alexander (1856-1916) and W. M. Chase (1849-1916) have also a high place.

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IN THE METROPOLITAN MUSEUM OF ART, NEW YORK CITY

THE SHEEPFOLD. By Charles Émile Jacque

ANIMAL painting is as old as any branch of art. Animals appear in pictures through all the ages—even the ancient Egyptians depicted them with vigor and affection. As a rule, in the works of the early Italian, Flemish and German painters the familiar friends of man, or the wild beasts of the wood, are merely accessories. Some artists, however, took particular delight in them. Leonardo da Vinci (vin'-chee) (1452-1519) was famed for his horses, and Dürer (1471-1528), has a magnificent horse in *Knight* and *Death* (1513).

Early in the seventeenth century animal painting began to take a conspicuous place in Rubens' spirited pictures of the chase; his sumptuous Adorations of the Magi (in which he sometimes introduces camels as well as horses); his stately processions; and his historical scenes. Frans Snyders (1579-1657), who studied with Rubens, specialized and excelled in depicting ferocious wild beasts, domestic animals, dead game and barn-yard fowls. Next to him, Jan Fyt (1609-1661) painted animals, hunting, fighting or dead, and with particular beauty of plumage and fur.

The Dutch in the seventeenth century began to see the beauty of animals grazing in their green meadows; and their combination of landscape and animals has never been surpassed. Paul Potter (1625-1654), for instance, is as great a landscape painter as he is a painter of animals. His *Young Bull* (1647) in the Hague is, perhaps, the most famous of all animal pictures, although his *Cow Reflected in the Pool*, in the same gallery, is a better picture. Albert Cuyp (kipe) (1605-1691), was famous for his horses as well as cattle. Adrian Van der Velde, their contemporary, was also noted for cattle and landscapes. Philip Wouverman (1619-1668) was famous for his white horse.

The combination of animals and landscape has been continued to our own day, one of the most famous examples being Anton Mauve (1838-1888), the painter of sheep. He is also high as a painter of landscape.

Charles Jacque (zshock) (1813-1894) is celebrated both for his painting and etching of sheep. The *Sheepfold* in the Metropolitan Museum of New York is startlingly true to life. The chickens scratching in the straw are as well painted as the sheep.

Contemporary with Jacque, and like Jacque a Frenchman, was Constant Troyon (1810-1865), one of the seven (or The Pleiades) of the Barbizon group,—the others being Millet (mee'-lay), Corot (kor'-roe), Daubigny (daw-been-yuh), Diaz (dee'ahth), and Dupre (duh'-pray). His *Cattle Going to Work* (in the Louvre) is one of the most popular of animal pictures. Nearly every big gallery contains a cow by Troyon.

Ranking next to Troyon and Jacque, and first of all women painters of animals, comes Rosa Bonheur (1822-1899), whose dashing *Horse Fair* in the Metropolitan Museum of New York is known everywhere. Her *Oxen Ploughing* (Luxembourg) is of equal merit and is nearly as well known.

An earlier animal (as well as historical) painter, Jean Louis Gericault (garé'-ee-koe) (1791-1824), was famed for his horses, often rearing. The horses in the series of Napoleonic pictures by Jean Louis Ernest Meissonier (may'-sohn-yay) (1815-1891) are less theatrical than Gericault's and equally famous.

Perhaps of all painters of animals Sir Edwin Landseer (1802-1873) touched the affections of the public most deeply. Everybody knows *Neptune* (the head and shoulders of a Newfoundland dog) and *Suspense*, a dog watching at a closed door. *The Cavalier's Pets* (two King Charles spaniels); *Jack in Office; Dignity and Impudence* (two dogs), *Eos*, a greyhound; *Shoeing the Bay Mare; Alexander and Diogenes; Monarch of the Glen;* and *The Shepherd's Chief Mourner* are known and loved by the whole world.

The cat has had its sympathetic painter in Madame Henriette Ronner, a native of Amsterdam, whose works are faithful to life and loved by all who understand cats.

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GENRE (Zshonr) is a scene of ordinary human life without any historical or religious significance. The picture must be small, very studied and much finished. The chief interest must be in the figures and the incident they relate. But with all that, the accessories have to be of the utmost importance. Carravaggio's famous *Card Players* would be a genre picture if it were not so large; but it is one of the first fine works representing ordinary human life, familiarly treated. Religious subjects—Madonnas alone with the Holy Child, or with groups of Saints or with little John the Baptist playing with the Christ-child; Adorations of the Magi and other religious pictures; portraits; splendid scenes representing Biblical Stories with famous personages in rich costume; and landscapes and marines seem to have attracted painters before they turned their attention to depicting the ordinary scenes of everyday life.

Genre painting began in the Low Countries in the seventeenth century with the so-called "Little Masters" of Holland and Belgium. Here were comfortable homes filled with native artistic products and curios of all kinds from the Far East, which were daily unloaded at Amsterdam and Antwerp; here tables groaned with finely cooked meats, and birds, choice fruits, oysters and rare wines, all served in the most beautiful porcelain and glass; here was rich furniture; and here were bright tapestries, gleaming brass; and here were lovely flowers. The people that enjoyed all these things wore rich clothing —the men, when not in armor, were clad in velvets and satins with lace collars and cuffs, bright scarves and broad-brimmed hats with splendid plumes and jeweled buckles, and the women wore gleaming silks, satins and rich velvets, delicate lace, sparkling jewels and fur-trimmed sacques. All these things appealed to such painters as Ter Borch (1608-1681), Metsu (1630-1667), Ver Meer of Delft (1632-1675), Pieter de Hooch (1630-1681), and Jan Steen (1626-1679). People sitting in a courtyard singing to lutes, or enjoying a little meal; ladies taking music lessons; the visit of a doctor to a patient; a lady dressing before her toilet-table; an officer bidding farewell to his love, a messenger delivering a letter; an oyster supper; a card-party; a cavalier and his family seated at a table drinking wine out of tall glasses; an old woman peeling apples in a kitchen; a company of soldiers drinking at an inn,—such were the subjects chosen by the greatest masters of genre painting.

Jan Steen loved to depict the amusements of peasant life in taverns and kitchens.

A master of genre was Ostade who loved skating scenes and out-of-door life. So did Teniers, who painted *Kermesses*, butcher shops, scenes at fairs and merry dances. Brouwer gives peasant life in its unlovely aspects—drunken scenes and brawls.

This group of painters started the fashion of telling an ordinary story of everyday life on canvas. Hogarth's *Marriage à la Mode* belongs to this class, and so do many works by the French Greuze and Chardin, though some of their pictures are slightly larger than genre, properly speaking, permits.

English painters have always been fond of this branch of painting. Sir David Wilkie told many stories with his brush. So did Sir John Millais (mil'-lay), and more recently Luke Fildes (look fildz), whose *Doctor*, reproduced herewith, comes in a clear line of ancestry from the Dutch masters of the seventeenth century, with more *sentiment*, however, than they usually give,—a sentiment which Greuze well knew how to put into his pictures. "The Doctor," to quote Fildes himself, "was an attempt to put on record the status of the Doctor of our own times, than whom no more noble figure could be imagined—the grave anxiety of the Doctor, and the faith of the parents who, almost overcome with dread, stand in the background, trusting the doctor even when their hearts fail." The painter assures us that the child is going to recover, though, of course, the picture does not say this.

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IF to paint the rapidly changing forms and hues of clouds above a country scene that is stationary is difficult, what about the question when the scene chosen is the ever-moving waste of waters? The country scene looks different, it is true, at different times of day; but at least the trees and rocks and roads will keep in place while the painter makes his sketch. But not so when he endeavors to paint the sea. Wave after wave moves onward, meets, mingles, tosses and breaks, dashing up pillars of spray-like stream and curling in soapy foam, before it takes a new shape and begins a new activity.

Form will not stand still a moment, and no form will ever repeat itself. What a task! The enormous difficulty has frightened painters, and few dare paint sea pictures. To catch any fine moment when the sea is radiant under lovely skies, or angry in an approaching storm, or excited under a heavy gale brings into requisition all the skill of a trained observer; all the quickness of a ready hand; and a vast poetic appreciation on the part of a marine painter. Because the artist has tried to fix a special moment is the reason that many early sea pictures seem "hard" and unnatural.

Modern painters, under the influence of the "Impressionist School," have done better. They do not try to "fix" an instant: they know that the great spirit of the sea is restless motion and rapid change, and that to make the ocean *seem to stand still* produces "hard" lines and an unnatural interpretation. A few painters—particularly our later American artists—paint from mid-ocean in the midst of the grandeur and mystery of the superb sea, with no sign of life, perhaps, but the seagulls spreading their white, wave-shaped wings above the tumbling waters, or sliding down the sides of the curving walls of water away from the gale. But such a subject calls for great poetic powers as well as skilled technique.

Marine painting is a modern branch of art. It is hard to separate it from landscape painting, because many landscape artists have also been great painters of the sea. Many sea pictures also show the shore in the foreground, or background.

Marine painting seems to have begun with the Dutch. Simon de Vlieger, in the beginning of the seventeenth century, was one of the first to paint the sea for itself. He was the master of Willem van der Velde (1633-1707), who represented every phase of the ocean, under tempest and calm, clouds and sunshine, with full-rigged vessels riding at anchor and at full sail. He also painted sea fights. His rival, Ludolf Buckhuyser (1631-1709), delighted in frigates and fleets, and preferred rough seas and dark skies to sunshine and air.

Jan van der Capelle (1650-1680), was famous for his calm waters and luminous skies.

Jacob Ruysdael (1625-1682), the landscape painter, also produced some fine marines: *The Dykes* (in the Louvre) and *Stormy Sea* (in Berlin) are ranked very high.

Jan van Goyen (1596-1666), one of the earliest and most poetic of Dutch landscape painters, also produced fine marines, many of them beautiful combinations of sea and dunes. These Dutch traditions are continued in the present time by many masters, the most notable, perhaps, being H. W. Mesdag, a painter of great power, sincerity and feeling.

Although many modern French artists paint the sea, especially from the northern coast, there have been no marine masters of the first rank. The most famous sea picture produced by a French artist is *The Wave*, by Gustave Courbet (koor'-bay) (1819-1878), now in the Louvre; *The Raft of the Medusa*, by Jean Louis Gericault (1791-1824), is noted, but owes its fame more to its dramatic incident than to its mighty waves.

J. M. W. Turner (1775-1851) was one of the great masters of marine painting. His *Fighting Temeraire* and his *Slave Ship* belong to the first order. Many consider these pictures his masterpieces.

John Sell Cotman (1782-1842), founder of the short-lived Norwich School, was also famous for his fine marines. He had the power to give the suggestion of blowing wind and dashing spray.

Among modern British painters Henry Moore has a marvelous knowledge of wave forms, and Hamilton Macallum has made a specialty of rippling water in bright sunlight.

But the painter of brilliant sunshine and radiant wave, above all others, is the Spaniard Sorolla (sor-rol'-yuh) (1862), who renders the sea and sunshine with mingled poetry and realism. *Beaching the Boat* (Hispanic Society of America) is wonderful in its display of light and atmosphere.

American artists have been very successful in marine pictures. The Morans have produced fine sea studies, and Alexander Harrison's *Wave* created a sensation twenty odd years ago. More elemental and much bolder are the works by Winslow Homer, Paul Dougherty, Charles H. Woodbury and Frederick J. Waugh, all of whom show the *weight* of the water with marvelous skill, as well as its splendid color; its curling foam, and its everlasting swing and rhythm and suggestion of roar and rush, light and wind.

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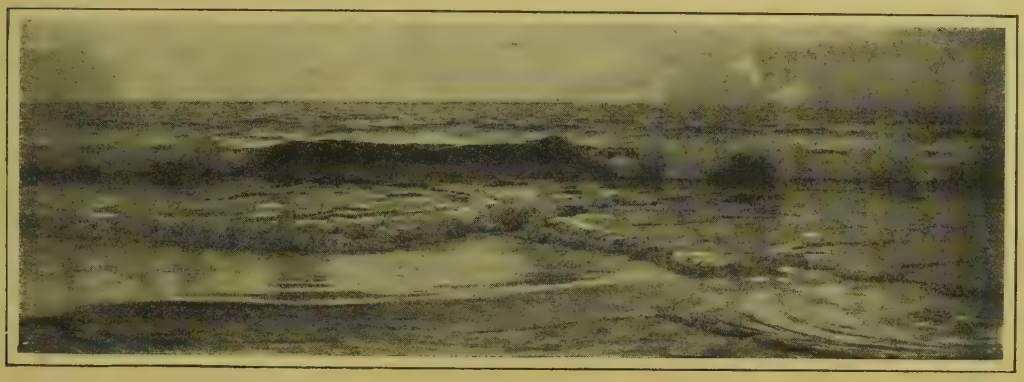

THE WAVE. By Alexander Harrison

THE PICTURE ON THE WALL

By FRANK WEITENKAMPF
Print Department, New York City Public Library

MENTOR GRAVURES

THE SHEPHERD, BY COROT · THE COLOSSEUM, BY PIRANESI · PORTRAIT OF THE ARTIST'S MOTHER, BY WHISTLER · THE SHEEPFOLD, BY JACQUE · THE DOCTOR, BY FILDES · THE NORTHEASTER, BY HOMER

EDITORIAL NOTE—The pictures selected for illustration of this number are but a small part of the good art of the world. They are printed here as examples of the art that is worthy of a permanent place on the wall. There are thousands of others. The purpose of this Mentor is to suggest good pictures, and the examples referred to here are such as can be found in the art shops at moderate prices.

MAN likes to see pictures on the walls of his home. That liking may find satisfaction in the original painting by Rembrandt that the millionaire railway magnate has acquired for $500,000 and proudly displays in his private gallery, or in the gaudily colored advertisement that some crossing-tender on his road has tacked up in his little coop beside the track. You may trace this instinctive love of decoration to the cave-dwellers, scratching figures of animals on the rocky walls that sheltered them. Fresco-paintings came in later centuries, also forming integral parts of the walls to which they were applied; then came the easel picture, intended to be hung up anywhere. No longer then was the picture a part of the wall, painted with distinct reference to the place it was intended to decorate. It might come down to-morrow to make place for another. The picture's importance became independent.

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Story-Telling Pictures

In the Church of Santa Maria della Grazia, Milan, Italy
THE LAST SUPPER. By Leonardo da Vinci

The pictorial element is the first to attract. In many works of art you will find reflected the life of the people, of their land and age, their costumes and customs, surroundings, habitations, utensils, and weapons. The result is a pictorial history of civilization. The ancient Greek statue, beautiful as a work of art, may show you how the old Greeks adjusted their garments. Gozzoli (got-zoe′-lee), painting the "Procession of the Magi" to Bethlehem, gives a remarkable picture of Florentine costume of the fifteenth century. Fragonard or Chardin (shar′-dahn), reflect the life of the gay nobility and of the more serious middle class in eighteenth century France. Dürer lets sixteenth century Germans pose—in their proper costumes and amid their accustomed surroundings—as Bible characters and saints. Chinese or Japanese painters, while offering the expression of subtle artistic feeling, show the beholder delightful bits of life.

In the Dresden Gallery
THE SISTINE MADONNA
By Raphael

This subject-interest makes today the first appeal. In the Metropolitan Museum in New York, Rosa Bonheur's "Horse Fair," Detaille's (dee-tie′), "Battle of Champigny" (shahm-peen′-yeh), and others that illustrate an incident or tell a story, attract crowds, which carefully avoid some special room in which is placed the cream of the collection. The story-telling pictures mentioned are by very able artists. But the subject-interest speaks to most people also from paintings that have little art quality to recommend them, even from the poorest color-prints and the most hideous colored comic supplements.

In the Pitti Palace, Florence
THE MADONNA OF THE CHAIR
By Raphael

NOTE—The familiar Old Masterpieces shown on this and the opposite page are examples of the very best in art. Such pictures belong forever on the wall.

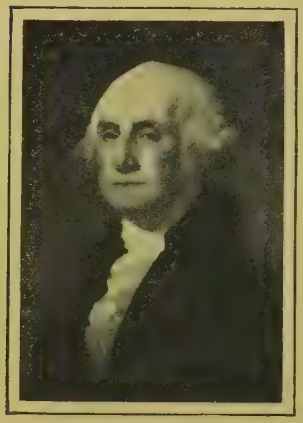
Good Art in Story Pictures

In the Louvre, Paris
THE IMMACULATE CONCEPTION
By Murillo

As to the story in a picture, there are stories and stories. There is the same difference between them that there is between some droll account of an East Side happening in New York City and a powerful pen-picture of the condition of the people in that region of the metropolis; between a joke concerning the Western wheat farmer and the vivid account of his activity, as we find it in the novel "The Octopus," by the late Frank Norris.

The story quality in pictures naturally has a strong hold on the plain, everyday man. These painted illustrations take the beholder into the realms of fancy, or the glory of battle, or the pomp of ceremony, or the events of everyday life, but always they depict for him the doings of his fellowmen. Of the art with which this is done most observers think only in so far as they note with satisfaction that *nothing has been left unsaid* by the painter—that the satins and silks and kettles and pans are painted to look deceptively like the real thing, not a detail being left to the imagination. Meeting our friends at this point, we can perhaps show them things just as interesting in subject-matter as those that they have been admiring—and better done. We might go with them into the European galleries, in which not a few are crushed into helplessness by the procession of Old Masters, and show them pictures of Dutch peasant life by Ostade (os-tah′-deh); of French eighteenth century gayety by Pater; of the sober bourgeois (boorzh′-wah) life of the same land and period by Chardin; of fifteenth and sixteenth century Venice by Bellini and Carpaccio (kar-patch′-yo); of eighteenth century England by Hogarth and by Morland, Hogarth painting in a vein of satire and moralizing, while Morland pictured rural labor and field sports. And, looking at these, we would see good art, presenting to us subjects that interest us because they meet our fullest human sympathies. Or we might go as far afield as the Japanese color-prints, strange, at first sight quite far from ordinary understanding. And yet when we see how they depict children at play, flying kites, busy at battledore and shuttlecock, blowing soap-bubbles or making snowmen, or women sewing and biting off the thread, applying rouge to the lips, or opening letters

In the Louvre, Paris
MONA LISA
By Leonardo da Vinci



WASHINGTON
By Gilbert Stuart

ELIZABETH BAS
By Rembrandt

BABY STUART
By Van Dyck

with a hair-pin, we feel again those touches that make the whole world kin. The problem, then, is simply this: if story-pictures are desired, they should be selected with care and thought. Not only the subject of the picture should determine choice, but the way in which it is told. Not only a good story is wanted, but also good art.

Racial Feeling in Art

There must be an honest endeavor on our part to understand the national and racial characteristics of art. We cannot, for instance, fully enjoy Dürer's pictures without putting ourselves into the period and country in which they were produced.

Then, back of all, there is the artist himself, through whose mind and temperament the various influences of time and place and race and inherited tendencies converge, as through a prism, to create a product which is the sum of all these influences—plus the artist's personality.

AGE OF INNOCENCE
By Sir Joshua Reynolds

The national feeling is of great importance. Art in its noblest form is the highest expression of its time, in which the aspirations of a people find voice. Here we are getting away from the mere matter of

COUNTESS POTOCKA
By Alexandre Kucharski

In Metropolitan Museum of Art, New York
WALT WHITMAN
By John W. Alexander

NOTE.—A group of portraits by old and modern masters—entirely different in character, yet all good art, and of enduring interest.

LADY IN BLACK
Portrait by W. M. Chase

HIERONYMUS
HOLZSCHUHER
By Albrecht Dürer

pictorial illustration of the outward form of life of a people —as we see it, for instance, in a Venetian procession by Bellini, or a tavern-scene by Jan Steen, or a bit of French peasant life by Breton, or a Tyrolean episode by Defregger. What I have in mind is the deeper, underlying character and significance of the art of a given time and people. Art is one phase in the development of humanity, one method of expression of thoughts and ideals. The artist must penetrate the outer shell of things, get at deeper meanings, express an inner, spiritual life. To study to look at the matter in this way is no more "highbrow" than is your preference for a writer who has something to say. You prefer a good novel or play to a weak one. The same holds good in regard to pictures.

It is evident that as you turn from the art of one country to another, or one artist to another, you must in a measure readjust yourself, change your point of view, just as when you turn from one language to another. To speak French one must, in a measure, think in French. To study the works of French or Italian or Spanish artists, you must, to an extent, put yourself into their way of seeing and thinking. To read Shakespeare you must feel with Shakespeare. To study and enjoy Rembrandt or Rubens or Reynolds, you must feel

THE SMILING CAVALIER
By Franz Hals

PORTRAIT OF W. M. CHASE
By John Sargent

DUCHESS OF DEVONSHIRE
By Thomas Gainsborough

MADAME VIGEE LE BRUN AND
DAUGHTER. Painted by herself

THE GLEANERS. By J. F. Millet

THE YOUNG BULL. By Paul Potter

with Rembrandt, Rubens or Reynolds. To go back for a moment to the matter of subject-interest. The *genre* (zshonr) piece, the picture of contemporary manners, has had noteworthy popular successes in the so-called anecdotal *genre*, holding some quite particular occurrence, mostly with a strong dash of the humorous or the pathetic. We see this art at its best in pictures such as Wilkie's "Blind Man's Buff," Landseer's "Shepherd's Chief Mourner," Erskine Nicol's "Disputed Boundary," Defregger's Tyrolean scenes, Hovenden's "Breaking Home Ties," and many others. At its worst it appears in paintings that are commonplace illustrations of trite pleasantries or mawkish sentiment, with a certain superficial realism. How many "Grandpapa's Birthdays," "Baby's First Footsteps," "Plighted Troths," "Lovers' Quarrels," and like pictorial offenses have not been committed!

AUTUMN OAKS. By George Inness

The Big Quality in Art

But there are also paintings dealing with general characteristics rather than with individual personalities and scenes. Cases in point are Millet's (mee'-lay) "Angelus," "Man with the Hoe," and—particularly—"The Sower." What a big view of life the last-named painting embraces! Could its subject be more simple? A peasant trudging over the field as the evening shadows close about him, scattering the seed broadcast from the bag suspended from his neck. Story? None beyond just what has been described. But the picture is full of significance. It shows not *a* sower, not a particular one, set out with a cheap

AVENUE AT MIDDLEHARNAIS. By Hobbema

SHEEP—SPRING. By Mauve

DANCE OF THE NYMPHS—MORNING. By Corot

MEADOW BORDERED BY TREES. By Rousseau

rural sentimentality, but *the* sower, the type of his kind. He works in the last glimmer of reflected light from the departed sun, alone with mother earth, the furrows opened to receive the fructifying seed. What a significant and noble conception of labor and its results! How simple and majestic a poem on the great natural mystery of creation!

Such a painting forcibly illustrates the all-important part that the artist's attitude plays in the success of his work. Or, put it in another way: his power to express the impression which scenes and objects and persons make on him.

What Art Means

Art is not a dead copy of nature. "Exact imitation of nature," wrote Taine, "is not the end of art. . . A good cast is not equal to a good statue." Art is "nature passed through the alembic of men" (Emerson), "nature seen through the prism of an emotion" (Alfred Stevens). Irving Babbitt crisply says that the artist is not "one whose business it is to cheat the intellect rather than to enchant the imagination." Anatole France, again, "In all the arts the artist can only reflect his own soul." And Emerson, once more: "A work of art, of whatever kind, sets us in the same state of mind wherein the artist was when he made it."

VIEW ON THE SEINE. By Homer Martin

The Artist and Ourselves

Thus we have two most important factors. First, for the production of a work of art, the artist's attitude toward

his subject, his ability to feel emotions and to express them. Second, for the enjoyment of a work of art, our attitude towards it as a product of the artist's mind, our willingness to see and feel as he saw and felt.

THE HORSE FAIR. By Rosa Bonheur
A justly famous animal picture

A scripture subject by Rembrandt, a landscape by Corot (korroe) or Inness, a portrait by Holbein or Lenbach, may be cited, at random, as examples of the importance of the artist's attitude toward his model. There is much opportunity of studying this in landscape art. When Amiel said: "A landscape is a condition of the soul," he meant that a landscape will render to you what you see in it, what emotions, what moods your contemplation of it may arouse. Landscape paintings will grow in the strength of their appeal to you in proportion as their painters have drawn from the scenes which they depicted a full measure of the deeper feeling that they could arouse. Paintings by the artists of the Barbizon School (Corot, Rousseau, Diaz, Daubigny) in France, or by American painters such as George Inness, Homer Martin, A. P. Ryder, A. H. Wyant, H. W. Ranger, will serve to illustrate this point.

IN A CARRIER'S STABLE. By G. Morland

Portraiture would seem at first sight to give the artist little leeway for any expression of individuality. There are plenty of well-painted portraits, presenting outward characteristics with a sufficiently happy touch—not by any means so many in which the artist has probed deeper, laid bare a human soul, given a sympathetic disclosure of personality. Hamerton once happily described the difference between Rembrandt's portraits, and those by so many others, by saying that his had dignity without pretension, and the others pretension without dignity.

THE CHRISTENING. By Jan Steen
A fine example of the Dutch *genre* art, which depicts the simple life of the people

Now all of this has been said not because it has obviously direct connection with the particular pictures that are on your wall or might be there, but because it is basic and fundamental. Our willingness to enter into an artist's

THE SHEPHERD'S CHIEF MOURNER
By Sir Edwin Landseer
An example of sentiment and good art combined

HOLLAND CATTLE. By Constant Troyon
Good both as an animal picture and as a landscape

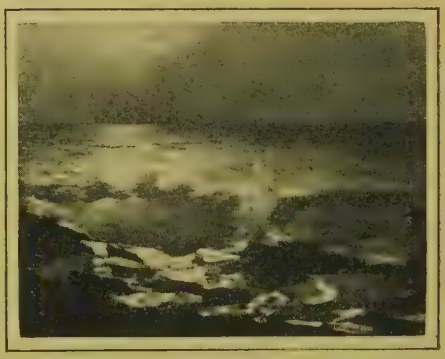
state of mind constitutes the gateway to the fullest enjoyment of a work of art. One must *live* a work of art with its author, and the test is, that you can live with it and that it does not pall.

Choosing Pictures

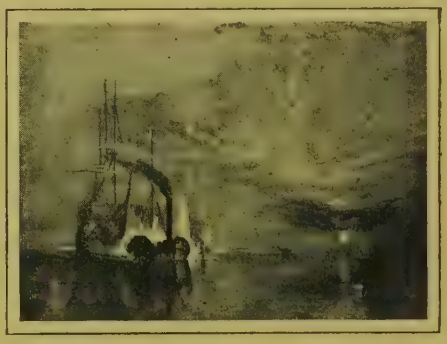
Do not be afraid to have an opinion—but be sure that there is a reason for it. The mind should enter into the enjoyment of art. It will not do to say "I don't know anything of art, but I know what I like." A well-known American painter was wont to reply to that statement: "So do the cows in the field." No, as one critic has put it, the thing to say is: "I know *why* I like." One's likes should be based on reason; one should *think* before one *prefers*. This does not imply an "exalted" attitude, leading to the bad taste of superciliousness. Broad-mindedness, catholicity, are always to be commended. And the other person has a right to opinions, provided that they are bred by reflection, and not born of an unthinking brain. In so far as he honestly, intelligently, enjoys the sort of art that strikes his fancy, that art enters into his life. Art is the expression of a love of beauty, and many people, well-educated people, who look upon so-called "high art" as something rather above them, which for very awe they do not learn to know as they should, may yet be applying æsthetic principles every day in choosing a necktie that is becoming, arranging a bouquet of flowers, preferring one building to another, or finding one person handsomer than another. The love of beauty may find expression in the designing of a gown, the decoration and furnishing of a home, the laying out of a park, the designing of a poster, the government control of the sky-line of buildings on a street, and of advertising posters and signs. The regard for beauty in the surroundings of our daily existence is as necessary to the mind as fresh air is to the body. It should be as natural to exercise it as to use the table-knife for cutting purposes only.

Courtesy of Frederick Keppel & Co.
LIGHT POST COACH
Painted by James Pollard; engraved by F. Rosenbourg

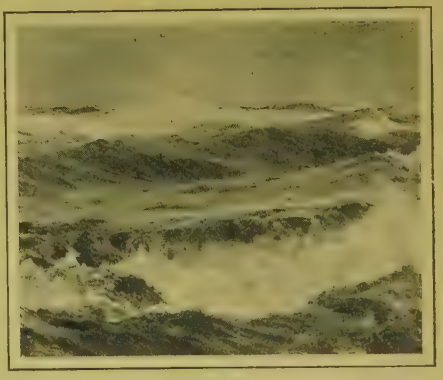
The decoration of our walls is an important form of expression of ourselves—a way in which we can display our taste. After all, it seems fairly simple. What should we demand of a picture? Why, that it have something to tell us, and that it tells it well. To tell *us*, mind you. To tell *you*—you, the one who lives within the walls on which the pictures are to hang. It is *your* life that the pictures are to enter into, and beautify. Yours the choice, yours the enjoyment and satisfaction. And, the choice should be worthy of yourself. The walls of a room, with their decoration, are a measure of the taste of the occupant of the room.



MOONLIGHT—WOOD'S ISLAND LIGHT
By Winslow Homer



THE FIGHTING TEMERAIRE. By J. M. W. Turner



THE ROARING FORTIES. By Frederick Waugh

Art Prints

What has been said of art in general and pictures in particular holds good—especially from the point of view of wall decoration—for prints. Prints (which term covers etchings, engravings on copper or steel or wood, lithographs, in fact all pictures produced by printing in any form) have this great advantage, that they can be circulated so as to bring the same picture before many people in many places. The painting that hangs in the National Gallery in London, the Louvre in Paris, the Pinakothek in Munich, the Hermitage in Petrograd, the Pitti Palace in Florence, the Metropolitan Museum in New York, or the Art Institute in Chicago, can be seen and studied only in the place in which it is located. The print, whether it be a reproduction of such a painting or an independent work of art, exists in each case in a number of copies—or impressions, to be more correct—which may be scattered all over the world, and give pleasure to many people in many places.

The print lacks one strong appeal of the painting—color—for most prints are in black and white. But it makes its own forcible bid for our interest, it has its own characteristics, and it has possibilities, at its best, of a delightful intimacy, which it is our privilege to enjoy. Where a man

Courtesy of Print Department, New York Public Library
PONTE DEL TRINITA, FLORENCE. By E. D. Roth
This and Pennell's picture below are fine examples of etching

Courtesy of Frederick Keppel & Co.
NEW YORK VIEW. By Joseph Pennell

might have one painting, he can have a dozen, or fifty, or a hundred prints. The field of print, while apparently a restricted one, is in reality exceedingly broad, and offers you the most varied and numerous possibilities of quiet enjoyment. There are a number of quite different methods of producing prints: etching, dry-point, aquatint, soft-ground etching, line engraving on copper and steel, mezzotint, stipple, wood-engraving, photography and lithography. Each of these has its well defined characteristics. Each is particularly well suited for special kinds of work. Certain of them have been especially identified with particular periods or nations or classes of people. And added to all these we have today the wide and varied development of "process" work, the so-called "photo-mechanical" processes—photogravure, half-tone, zinc-etching, three-color process, etc.

© Curtis & Cameron
HOSEA
By John Sargent
One of the figures in the famous mural painting of "The Prophets" in the Boston Public Library

To choose well from the products of these processes pictures that you can hang on your wall and that you will care to keep there and look at *with your mind through your eye*—that is your privilege.

SUPPLEMENTARY READING

ART FOR ART'S SAKE *By John C. Van Dyke*
Illustrated

THE MEANING OF PICTURES
Illustrated *By John C. Van Dyke*

HOW TO APPRECIATE PRINTS
Illustrated *By Frank Weitenkampf*

HOW TO STUDY PICTURES *By C. H. Caffin*
Illustrated

SCHOOLS AND MASTERS OF PAINTING
Illustrated *By A. G. Radcliffe*

PICTURES AND THEIR PAINTERS
Illustrated *By Lorinda M. Bryant*

GUIDE TO PICTURES FOR BEGINNERS AND STUDENTS *By C. H. Caffin*

HOW TO JUDGE OF A PICTURE
Illustrated *By John C. Van Dyke*

*** Information concerning these books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

I take it that there are pictures on the wall in every home in the world. The love of pictures is universal. The pictures that we put on the wall are, of course, the pictures that we like. Whether as a boy or girl, having one's own particular room at home to decorate according to choice, or man and wife making the common home attractive, or a single individual, living in apartments and seeking for a pleasing effect on the wall—in each case the condition is the same. The picture on the wall expresses the taste of the one that puts it there. We are all credited or convicted by our pictures.

★ ★ ★

A young woman would not appear at a disadvantage in her dress or conversation. She gives thought and judgment to these matters. A young man seeks the things that are most to his advantage. Young married folks want a home that shows that they know something and have some taste. All this is natural and right. It is simply following the line of human progress and development. It is inspired by the desire, inherent in most of us, to improve ourselves and make the most of our conditions. Then, young woman, with your own particular room in your parents' home; and young man or woman with your own quarters where you live your individual life; and young married folks, who are building up your new home—what about the picture on the wall? You have given a good deal of attention to the selection of your linen and silver, your curtains and rugs and furniture. Have you given like attention to the selection of your pictures? Do you want to have your friends come into your house, find enjoyment in your society and satisfaction in your hospitality—and then go away in wonder and amazement at the queer assortment of pictures on your walls?

★ ★ ★

Some give it all over to the interior decorator and rest content with the results. A comfortable way to settle the matter, if one has the comfortable means to settle the bill. But what does that mean? In that case one may not even know what one's pictures are—not even know that they are good when a discerning, intelligent friend says that they are. One can only say: "They ought to be good, for I paid a good price for them"—like those that fill up their libraries by contract and never even cut the leaves of their books.

Pictures and books are not material assets for display purposes. They are friends to live with—to know and love and to make part of our lives. "That picture means something to me. I know that it is good and I know why it is. I see more in it the longer I live with it." Can we say that of the picture on our wall? If we can, we know the real benefit and joy of art.

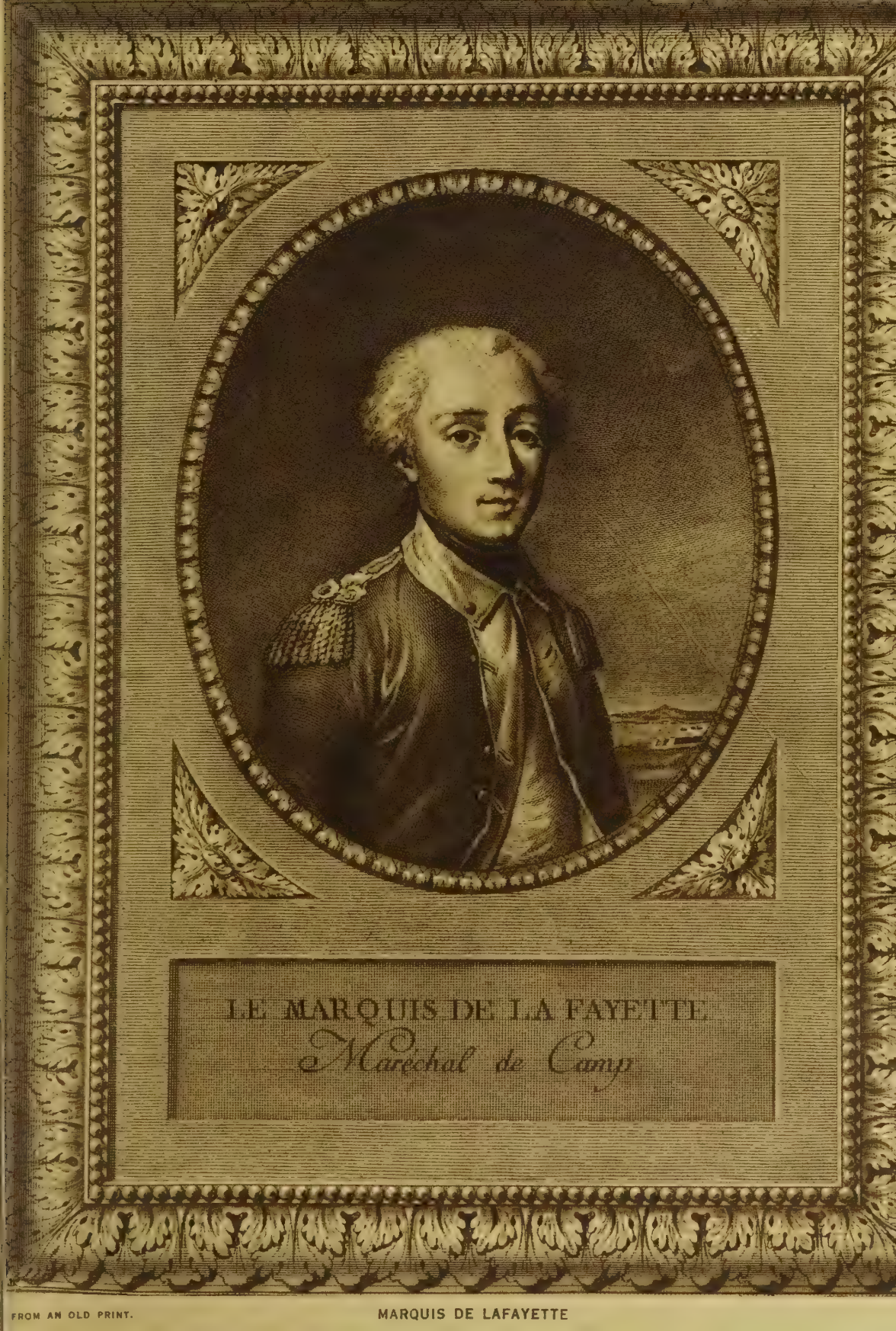
This number of The Mentor points out some of the qualities that one should look for in good art. If more information be wanted, that admirable little book by Professor John C. Van Dyke, "How to Judge of a Picture," will be a great help. After all your reading, however, the matter will finally rest with you. It will be your taste and judgment that will determine your choice. So read, look and listen! Read good books on art. Look at good reproductions of masterpieces. Note what intelligent lovers of art have to say of these works. In observing pictures, put yourself in touch with each artist in turn, enter into his point of view so as to see as far as possible with his eyes, and so estimate his art appreciatively.

★ ★ ★

"But what qualities shall I consider in choosing my pictures?" you ask. First of all, be honest with yourself. Don't choose pictures just because someone else says they are good, if they don't appeal to you. Get the message of art yourself. Pick out a picture that imparts that message to you—a message that appeals to you by its truth and sincerity, that lifts you out of yourself, that makes you feel better for dwelling on it—a picture that you want to live with always because it inspires you by its very companionship. It may be a portrait, it may be a landscape, it may be a sweep of ocean view, or a gentle scene in home life—whatever the subject may be, if the workmanship is good, if the expression is clear and eloquent, and if it stirs you with its fine message, be sure you may treasure it as one of your own chosen bits of art.

W. D. Moffat

EDITOR



FROM AN OLD PRINT.

MARQUIS DE LAFAYETTE

ONE

IN the wild Auvergne Mountains in the southern part of France, stands a grim old castle which was originally built in the fourteenth century. It is called the Château de Chaviniac de Lafayette; and though it was burned to the ground in 1701, it was rebuilt as nearly like the earlier structure as possible. Here on September 6, 1757, was born of noble parents a boy who was to be one of the greatest lovers of liberty the world has ever known —Gilbert Motier Marquis de Lafayette.

Lafayette's family was a martial one, both on the side of his father and his mother. His father, the young Colonel Lafayette, during the summer before his son's birth had parted from his beautiful young wife and galloped away to take part in the Seven Years War—never to return. Lafayette, then, never saw his father. As a child his health was somewhat delicate, but with the years he grew in strength and developed a very vigorous constitution.

Lafayette received his first education at home, but in the year 1768, he went to Paris, where he was placed by his mother in the Collège du Plessis (pless'-see), a school for boys of the nobility. There he was assigned to a small room, and studied such things as heraldry, dancing, writing, drawing, fencing and riding. Not a great deal of attention was given to books in those days, but naturally he took up the Latin masters, such as Cæsar, Sallust, Virgil and Cicero; and studied history, with special attention to wars. Lafayette worked hard at school. In 1770 his mother died in Paris. At about the same time one of her uncles passed away, leaving the young Lafayette a large and valuable estate. In this way the boy became one of the richest youths of the time.

In those days it was the custom for people of noble family to marry early. Consequently, on April 11, 1774, at the age of sixteen, Lafayette married Marie Adrienne François de Noailles, who was fourteen. She later became a woman of great and noble character, and was a true and loving wife to Lafayette. When heavy sorrows came she clung to her husband with unselfish heroism.

At first the young couple made their home with the mother of the bride. It was a delightful place for people to spend their lives; but big things were happening in the world, and Lafayette was not destined to pass his life quietly there.

At this time Lafayette was a tall, slender young man, with clear hazel eyes and red hair. He was a pleasing conversationalist, although a little shy. After his marriage he continued his studies at school, and then went to the military academy at Versailles. Leaving there, he and his wife plunged into the court activities of the time. This sort of thing did not attract Lafayette a great deal, however. He hated the pomp and panoply, the artificiality of the French court of that period. He was a lover of liberty and could see no sense in silly ceremonies.

In the summer of 1775 Lafayette was stationed with his regiment at the French garrison of Metz. While there the Duke of Gloucester, brother of George III, King of England, came to that city and was honored at a dinner. Lafayette was one of the guests. The duke had just received letters from England telling of the revolt of the American Colonies against the mother country. This was the first that Lafayette had heard of American independence. His sympathy was immediately aroused. Every instinct impelled him to take sides with the struggling colonies. Even before he left the table he had determined to go to America and offer his sword in the cause of freedom.

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IN THE COLLECTION OF COL. P. CONNOLLY

LAFAYETTE. BY BOILLY

LAFAYETTE, just eighteen, went to Paris at once, and endeavored to enlist two young friends in his plan. Indeed, he managed to get them to consent to go, but their parents emphatically refused permission. Lafayette, taking for his motto one that he had seen upon the shield of one of his famous ancestors, "*Cur Non?*" (Why Not?), made up his mind that he would go alone.

The boy was introduced to Baron de Kalb, an officer in the French army with the rank of Lieutenant-Colonel, who was also seeking an opportunity to go to America. Then Lafayette secretly went to Silas Deane, an American agent in Paris. On December 7, 1776, an arrangement was made by which Lafayette was to enter the American service as a Major-General. It is interesting to read the agreement that Lafayette signed:

"The wish that the Marquis de Lafayette has shown to serve in the army of the United States of North America and the interest that he takes in the justice of their cause, making him wish for opportunities to distinguish himself in the war, and to make himself useful to them as much as in him lies; but not being able to obtain the consent of his family to serve in a foreign country and to cross the ocean, except on the condition that he should go as a general officer, I have believed that I could not serve my country and my superiors better than by granting to him, in the name of the very honorable Congress, the rank of Major-General, which I beg the States to confirm and ratify and to send forward his commission to enable him to take and hold rank counting from today, with the general officers of the same grade. His high birth, his connections, the great dignities held by his family at this court, his disinterestedness, and, above all, his zeal for the freedom of our colonies, have alone been able to induce me to make this promise of the said rank of Major-General, in the name of the United States. In witness of which I have signed these presents, done at Paris, this seventh of October, seventeen hundred and seventy-six."

To this startling document the undaunted boy affixed the following:

"To the above conditions I agree, and promise to start when and how Mr. Deane shall judge it proper, to serve the said States with all possible zeal, with no allowance nor private salary, reserving to myself only the right to return to Europe whenever my family or my king shall recall me; done at Paris this seventh day of October, 1776. (Signed) The Marquis de Lafayette."

Just at this time bad news began to come from America. The disastrous defeats of Long Island and White Plains had happened, and the English army was being reinforced by regiments of Hessian soldiers. There was very little hope that the brave colonies would win their independence. The American agents told all this to Lafayette, but nothing could dissuade him from his purpose. He received the news with calmness, and thanked Deane for his kindness in trying to save him from disaster. Then he added: "Until now, Sir, you have only seen my ardor in your cause; I may now prove to be really useful. I shall myself purchase a ship to carry out your orders. We must show our confidence in the future of the cause, and it is especially in the hour of danger that I wish to share your fortunes."

Shortly thereafter Lafayette went to England for three weeks on a visit that had been arranged some time previously. While there he made no secret of his sympathy with the colonies. As soon as he could, Lafayette left England and hurried back to Paris. Preparations for his trip to America were almost complete. At last all was ready, and Lafayette went to Bordeaux, where the boat was waiting. The King of France, learning of his plans, forbade him to proceed to America. Also a child had been born to his wife. Every consideration seemed to be against his sailing; but the young soldier, tossing everything aside for his dream of liberty, gave up thoughts of home and comfort, dared the displeasure of his sovereign, and set out for Los Pasajos in Spain, where his ship and friends had proceeded and were awaiting him. He reached this port safely, and on April 20, 1777, set sail in his vessel *La Victoire* for the new world.

Two British cruisers were soon in pursuit of him. But Lafayette managed to elude them. After seven weeks' sailing the vessel reached the American coast. Hostile English vessels swarmed the waters. The navigator of *La Victoire* wondered how he could land his precious charges safely. At last a sudden gale of wind drove the enemy frigates away from the coast for a short time, and the vessel passed through the blockade. Finally, Lafayette and his friends landed safely near Georgetown, South Carolina. Then he hastened to Philadelphia, which was the seat of government of the colonies.

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LAFAYETTE'S reception by Congress was not as enthusiastic as it might have been. The reason for this was that the American Government was continually bothered by foreigners seeking commissions of high rank in the army. Another thing was that they rather doubted that anyone of Lafayette's age could accomplish much. They did not know the youth. At last Lafayette wrote a letter to Congress, part of which said: "After the sacrinces that I have made in this cause, I have the right to ask two favors at your hands; one is that I may serve without pay, at my own expense; and the other is that I may be allowed to serve at first as a volunteer."

This changed matters, and on July 31, 1777, Congress passed a resolution accepting Lafayette's services, and "in consideration of his zeal, illustrious family and connections," gave him the rank of Major-General in the army of the United States.

A day or so after this, Lafayette met General George Washington for the first time at a military dinner given in Philadelphia. This was a momentous occasion for the young Frenchman; for he now saw face to face the man whom he was to follow devotedly for years, and for whom he was to have the greatest admiration throughout his entire life. Washington, on his part, read Lafayette's character correctly, and judged rightly that the young man would prove of great value. He invited him to be on his staff, an offer which Lafayette delightedly accepted.

Lafayette's military career in the United States, while very creditable, was not especially noteworthy. He served bravely and well, but his actual military value to the colonies was not nearly so great as the moral value of his courageous and sympathetic spirit. At the time he came to America, the American army was one only in name. It was small, badly drilled, and uniformed in rags. Lafayette, however, saw everything in the best light. When General Washington apologized for the deficiencies of his little army and suggested that Lafayette must notice a difference between it and those of Europe, the young Frenchman answered that he had come to America to learn, not to teach. This was typical of Lafayette. He was always the courteous gentleman.

Lafayette's first battle in the Revolution was Brandywine, on September 11, 1777. The American troops were defeated, but Lafayette showed great courage. When he saw the Revolutionists were retreating in panic, he plunged into their midst and endeavored to make the men turn and take a stand against the enemy. The odds were too great, however, and the retirement had to be continued. In the midst of the battle Lafayette received a musket ball in his left leg, just below the knee. He insisted on remaining with the troops until he became too weak to go further. Finally Washington made him give himself into the hands of the surgeons. When the doctors expressed fear for his safety, Lafayette looked at the wound and cried: "Never mind, gentlemen; I would not take fifteen hundred guineas for that."

When he got back to Philadelphia, Lafayette wrote immediately to his wife so that she might not worry concerning his safety. "It was a mere trifle," he wrote. "All I fear is that you should not have received my letter. As General Howe is giving in the meantime rather pompous details of his American exploits to the king his master, if he should write that I am wounded, he may also write word that I am killed, which would not cost him anything; but I hope that my friends, and you especially, will not give faith to reports of those persons who last year dared to publish that General Washington and all the general officers of his army, being in a boat together, had been upset and every individual drowned."

After he recovered from his wound, Lafayette received command of a detachment of 300 men. In this command he showed great skill; and Washington secured for him the command of a division. In a letter written on November 1, 1777, the American general advocated this: "The Marquis de La Fayette is extremely solicitous of having a command equal to his rank. I do not know in what light Congress will view the matter, but it appears to me, from a consideration of his illustrious and important connections, the attachment which he has manifested for our cause, and the consequences which his return in disgust might produce, that it will be advisable to gratify his wishes, and the more so as several gentlemen from France who came over under some assurances have gone back disappointed in their expectations. His conduct with respect to them stands in a favourable point of view—having interested himself to remove their uneasiness and urged the impropriety of their making any unfavourable representations upon their arrival at home. Besides, he is sensible, discreet in his manners, has made great proficiency in our language, and from the disposition he disclosed at the battle of Brandywine possesses a large share of bravery and military ardour."

On December 20th Lafayette received the joyful news that he was the father of a second daughter. The whole American camp joined with him in rejoicing, for the young Frenchman was a favorite.

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THE winter of 1777 and 1778 was the darkest period in the whole American Revolution. It was the winter of Valley Forge. Only the genius and wonderful spirit of Washington kept the cause of the colonies alive. The soldiers were inadequately clothed, many of them were sick, and food was scarce. The situation was perilous.

Even the government of the colonies was not a united one. Washington had enemies; selfish and ambitious men conspired against him. A less courageous man than Lafayette might have justified desertion of such a seemingly hopeless cause. Who, then, can estimate the value of his unfailing sympathy and support during that trying time?

In the first month of 1778 Lafayette received a commission as General-Commander of the Northern Army, which was to proceed against Canada in an endeavor to win the people there to join the American revolt. When he got to Albany, however, he found that supplies, men, and money promised him had not been sent. The expedition had to be given up. Lafayette returned to Valley Forge regretfully, but by no means discouraged. Nothing could break his spirit.

On May 2, 1778, came the news that a treaty of alliance had been signed between France and the United States. This caused great joy at Valley Forge. A national salute of thirteen guns was fired, and a fine dinner was served for the Officers. Shortly thereafter, Washington ordered Lafayette to take 2,000 men and proceed to Barren Hill, outside Philadelphia, so that a watch might be kept on the British in that city. The English, learning that he was there, promised themselves that they would capture him. In fact, a special party was planned for one evening, at which the invited guests were told that they might expect the pleasure of meeting the distinguished prisoner.

Lafayette upset their plans, however. When the British attacked Barren Hill he retreated from a seemingly impossible position in a masterly manner, and the English had to go back to Philadelphia in chagrin without their promised captive.

This was on May 28, 1778, and a month later the English evacuated Philadelphia and started northward with the intention of joining forces with the English army in New York City. Washington determined to attack this army on the march. The battle took place at Monmouth, New Jersey, on June 28. General Lee treacherously gave an order for his men to retreat, and nearly threw all Washington's plans into confusion. The great general himself rode up just in time to save the day. The British were defeated and that night retreated to Sandy Hook, where they crossed to New York.

During all the campaign of the summer of 1778, Lafayette was a great help to Washington. He acted as a sort of go-between for the Americans and the French who had arrived in America by that time. But the strain of the excitement and work of the summer had been too much for the young man, and a violent fever put him to bed for some weeks. When he recovered he set sail for France on January 11, 1779, with the intention of joining the French continental army in the war which had been declared between England and that country. He arrived in France in February, 1779, and was welcomed tenderly by his wife. He returned to America in 1780, bringing to General Washington the glorious news that France would send the revolutionists a reinforcement of six ships, and six thousand men of the regular infantry, to which was added a loan of 3,000,000 livres.

From April until October, 1781, Lafayette was in charge of the American forces in Virginia. In most of this campaign he was opposed to Lord Cornwallis, the commander of the British forces in that part of the country. The English general, of course, despised the Americans. In one letter that was captured he said, "The boy cannot escape me!" This contemptuous allusion merely strengthened Lafayette's determination to conquer. Finally, on September 24, 1781, Cornwallis was forced into the city of Yorktown, Virginia, situated near the entrance to Chesapeake Bay. He immediately began to prepare it against a siege. On the 30th of August the French fleet, under command of the Count de Grasse, with twenty-eight ships of the line, appeared in the waters of Chesapeake Bay. Soon after a large detachment of French troops joined the forces of Lafayette; and the siege of Yorktown was on. Washington himself at once arrived to take charge of the enterprise, and Lafayette surrendered his command gladly into the hands of his superior officer. At last, on October 19th, Cornwallis surrendered Yorktown, his entire army, and himself. It was a time of great rejoicing for America. The independence of the country was now practically assured.

Lafayette immediately obtained leave to return to France. He was received there as a hero, and at once became involved in negotiations for peace between England and the United States. An armistice was signed on January 20, 1783.

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IN PROSPECT PARK, BROOKLYN, N. Y. LAFAYETTE MONUMENT—DESIGNED BY DANIEL CHESTER FRENCH COPYRIGHT, PRESS ILLUS

LAFAYETTE revisited America in 1784. The American people received him with great honor. He spent ten days at Mount Vernon with Washington, and visited many of the great battlefields of the Revolution. In addition, he was made an American citizen in legal form. After this visit Lafayette made a long tour through Germany and Austria. Shortly after came the outbreak of the French Revolution. In 1787 he took his seat in the Assembly of Notables. He showed Liberal tendencies in that Assembly and afterward. In 1789 he was elected to the States-General, and took a prominent part in its proceedings. Then he was chosen vice-president of the National Assembly, and on July 11, 1789, presented a Declaration of Rights modelled on Jefferson's Declaration of Independence. Four days later he was chosen by acclamation Colonel-General of the new National Guard of Paris. It was he who proposed the combination of the colors of Paris—red and blue—and the royal white into the famous tricolor cockade.

For the next three years Lafayette was very closely linked with the affairs of France. He saved Queen Marie Antoinette from the hands of the people in October, 1789; and risked his life many other times. When three French armies were formed in December, 1791, to attack Austria, Lafayette was placed in command of one of them. However, he was in definite opposition to the radical Jacobin party. For this on August 19, 1792, the Assembly declared him a traitor. He fled to the neutral territory of Liege, but was taken prisoner there; and finally in May, 1794, the King of Prussia gave him into the keeping of the Emperor of Austria, who imprisoned him in the fortress of Olmutz, far up in the Carpathian Mountains. There he remained three years.

Lafayette made many attempts to escape from Olmutz. He was not forgotten, and several people interceded for his release, President Washington of the United States among them. This was all to no avail, as were also his attempts at flight. One nearly succeeded. It was planned by a Doctor Bollman, who was particularly interested in Lafayette. As his accomplice he chose a man named Francis K. Huger. It is an interesting coincidence that he was the first child that Lafayette saw when he first landed in America. Huger had always had the greatest admiration for the Frenchman, and when an opportunity offered to serve him he grasped it delightedly.

Under disguise Dr. Bollman managed to communicate with Lafayette, and planned the method of escape. Then Bollman and Huger in October, 1794, rode toward Olmutz. Lafayette was out for his usual ride in the air with two guards. At a signal Lafayette seized the officer's sword and struggled with him. The two conspirators leaped down from their horses, got Lafayette on one of them, and told him to ride off. In the meantime, one of the soldier guards ran toward the town, giving the alarm. Huger and Bollman then mounted the remaining horse, but this horse threw them both in a ditch and ran away. Finally, the horse was caught, and Bollman mounted alone and rode off to find Lafayette. Huger was captured and thrown into the fortress. Bollman was also captured, but they were finally released. Lafayette got only twenty miles away from the prison when the blood on his coat aroused suspicion, and he was arrested and carried back to Olmutz. This gallant attempt failed through force of circumstances.

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URTESY OF E. F. BONAVENTURE LAFAYETTE, THE MATURE— FROM A PAINTING BY ARY SCHEFFER

AT last the world knew where Lafayette was, and his wife Adrienne was permitted to visit him. It was a reunion of great joy. Lafayette's prison days were now far easier to bear, and finally Napoleon secured his release in 1797. Lafayette was not allowed to return to France, however, at that time. In 1799 he revisited his native country. He immediately took an active interest in politics and voted in 1802 against the life consulate of Napoleon, and two years later against the imperial title. From 1818 to 1824 he was a deputy, voting always on the Liberal side.

It was in 1824 that he set out to revisit America for the last time. He reached New York on August 16th, and was overwhelmed with attention and honors. His trip through the country was a triumphal tour. He was voted a sum of $200,000 and a township of land. On the 4th of July, 1825, he took part in laying the cornerstone of Bunker Hill Monument, at which time Daniel Webster delivered his famous oration.

Lafayette returned to France in the fall of 1825. From then on until his death he sat in the Chamber of Deputies. During the revolution of 1830 he was in command of the National Guard. It was on the centennial anniversary of the birth of George Washington, in 1832, that the 27th Regiment State Artillery of New York sent him a beautiful commemorative medal.

During these last years he lived on his magnificent estate of 800 acres in a fine old mansion. In this house a picture of Washington had the place of honor. Even its name, La Grange, was American, for it was so called in honor of the New York home of Lafayette's friend, Alexander Hamilton. One room was particularly sacred—in it Madam Lafayette had died. This room was never entered except on the anniversary of her death, and then only by Lafayette himself.

His home was a meeting place for brilliant and famous people—Irish, Poles, and Americans.

On May 20, 1834, Lafayette died in Paris. All France mourned him; but in no country was his passing more sorrowfully felt than in America. Members of Congress wore the badge of sorrow for thirty days, and there was general mourning among the people.

Lafayette's services to his own country were great; and his sincere love for America will always endear his name to the people of this country; but all the world honors him for the man he was. He loved liberty, and he never ceased to fight for it throughout his entire life. He was courageous, and absolutely determined in his desire to see freedom over all the world.

Many monuments have been erected to him. One of the most notable is that in New York City, erected in 1876. The one in which the young people of America, however, have a special, personal interest is that which was presented to the French republic by five millions of American school children. Paul Wayland Bartlett was the sculptor, and the statue was completed in 1908 and placed in a court in the Louvre in Paris.

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THE MENTOR · DEPARTMENT OF BIOGRAPHY
JANUARY 15, 1918

Metropolitan Museum of Art, New York
LAFAYETTE AND WASHINGTON AT MOUNT VERNON (1784). By Rossiter and Mignon

LAFAYETTE

By ALBERT BUSHNELL HART
Professor of Government, Harvard University

MENTOR GRAVURES

LAFAYETTE, BY BOILLY • AMERICA'S FIRST ALLY, BY PERCY MORAN • MARQUIS DE LAFAYETTE • CHATEAU DE LA GRANGE—BLENEAU • LAFAYETTE MONUMENT, PROSPECT PARK, BROOKLYN, N. Y. • LAFAYETTE THE MATURE, BY ARY SCHEFFER

THE world loves a soldier, not merely because he is dashing and well appareled, not simply because he is good-looking and bold and fearless, but because he represents the gallantry, the devotion, the self-sacrifice which has for ages been supposed to be the highest trait in manly character. Whether our khaki-clad heroes walk, dance, or march, we think of them as the souls of chivalry, as ready to save a life as to risk their own. Thank Heaven that we have an imperishable list of gallant soldiers in our American annals, all the way from doughty Myles Standish, peppery Sir William Phipps, and fearless Hannah Dustin, hatcheting her Indian captors, through Israel Putnam, and brave Joseph Warren, and bellicose Andrew Jackson, and "give-them-a-little-more-grape-Captain-Bragg" to Farragut, lashed to the shrouds, and Jeb Stuart, the golden-haired cavalryman, and Custer dying in the midst of a circle of dead Indian foes, and Victor Blue, "carrying the message to Garcia." Histories, biographies,

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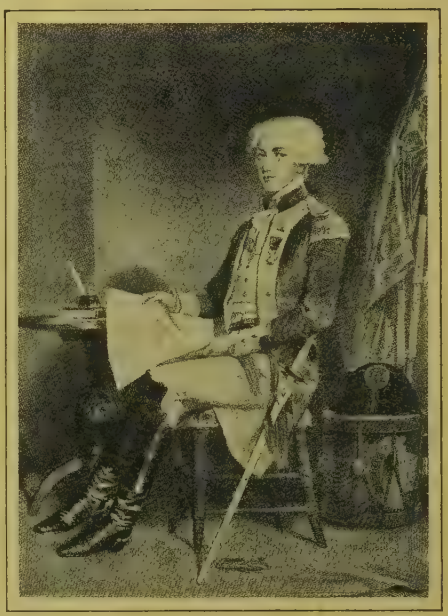
story-books, school-books, all are full of brave men and steadfast women who lifted the standard of human nature, with their "deeds of deringdo."



LAFAYETTE AS AMERICAN MAJOR-GENERAL
From a portrait by A. Chappel

Young Lafayette

Among the splendid company of glorious soldier souls, one stands out as immortally American, though he spent only about fifty months out of his seventy-seven years of life in the New World. This Monseigneur Marie-Joseph-Paul-Yves-Roch-Gilbert Motier de Lafayette, son of Monseigneur Michel-Louis-Christophe-Roch-Gilbert Dumotier marquis de Lafayette, baron de Vissac, lord of Saint-Romain and other places is known to the affectionate American heart as simply "Lafayette," a name perpetuated in counties in seven of the states of the Union, and in twenty-four other places within our boundaries. In all the brilliant galaxy of heroes, next to Washington stands Lafayette as the distinguished figure, the high-minded soldier, the cordial friend, the warm-hearted companion, the untiring and successful commander.

The Government of the United States at present thinks no youth under twenty-one competent to receive a commission as second lieutenant. Lafayette reached the United States about two months before his twentieth birthday, and Congress speedily made this stripling a major-general —a compliment intended at the time more for his country, his social connections, and his influence than to a soldier whose only experience had been that of a junior officer in a peace regiment. At first sight of General Washington the gallant young Frenchman was carried away by "the majesty of his countenance and of his figure—the affability of his manners and the dignity with which he addressed those about him." Washington instantly placed him on the staff, and to the day of his death felt for the young man the affection and the pride of a father.

LAFAYETTE
From a portrait by J. Guerin

What sent this young and gifted noble away from France, where everything promised a brilliant career, this member of a distinguished family, the son of an officer, owner of a great estate, married at the age of sixteen and a half

years to the daughter of the Duc de Noailles with 200,000 crowns dowry, this associate of the highest in rank and education? He later recorded that, at a dinner held about four months after the battle of Lexington and Concord, he learned that the American colonists were fighting against their mother country, Great Britain, and "before he left the table the thought came into his head, that he would go to America and offer his services to a people who were struggling for freedom and independence." In due time he offered his services to Silas Deane, the American representative at Paris, agreed with him to go to America, and made his departure under the assumed name of "Sieur Gilbert de Mottie, twenty years old, tall, and with light hair." His young wife encouraged him; he defied royal orders to remain; and that is how he landed in America, on June 5, 1777.

LAFAYETTE
From portrait painted by L. Barre

LAFAYETTE AS A GENERAL OF MILITIA
in Paris. From a rare unpublished print in the collection of Godefroy Meyer, Paris

Major-General Lafayette

Though not the first nor the last of the great Frenchmen who took up the cause of the enemies against their hereditary enemy, Great Britain, Lafayette brought a reënforcement of immense value to the struggling patriots. He did what Pershing has done in our times, by landing in France. He brought some men with him, but they were only the heralds of the men, ships, guns, munitions, and moral support, which were destined to turn the tide of war. With him came that excellent soldier Baron de Kalb, who shared in his popularity and was also made major-general.

Lafayette's first experience with the American army he himself thus described: "About eleven thousand men, rather poorly armed, and much worse clad, presented a singular appearance. In the midst of a great variety of clothing, sometimes even of nakedness, the best garments were a sort of hunting-shirts, loose jackets made of gray linen, very common in Carolina. They were

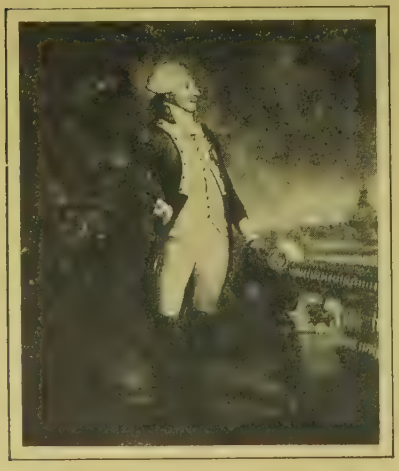
LAFAYETTE
at the conclusion of the Virginia Campaign, 1781. This portrait was dedicated to Washington

always drawn up in two ranks, the small men in front; but with this exception there was no distinction made as to size. In spite of these disadvantages, however, they were fine soldiers and led by zealous officers. Bravery took the place with them of science, and every day improved their experience and their discipline." When Washington intimated that things must seem unusual to a French soldier, Lafayette made the quick and memorable reply: "I am here to learn and not to teach." Indeed, no foreigner could more quickly and more completely grasp the American spirit.

LA GRANGE—BLENEAU. Residence of Lafayette

ADRIENNE DE NOAILLES, Marquise de Lafayette. From a miniature in the possession of the family

Active service quickly opened up for the young major-general. He was with Washington at the Brandywine, where he sprang to the front and did his best to rally the retreating troops, at Chadd's Ford, and received his baptism of blood by a shot in the leg, yet continued to do his best to check the rout. To his wife he wrote: "I trust, my dear heart, that you will not be uneasy about me." Before his wound was healed he was again engaged in a little fight at Gloucester, New Jersey, where under General Greene he had a small command of his own. Then he was made commander of a division, of which he was obliged to say: "It is weak in point of numbers at present, even in proportion to the weakness of the whole army; it is almost naked, though I have been promised cloth out of which I shall make clothes, and recruits out of which soldiers must be made." No service was possible during the memorable winter of 1777-1778 when the army lay at Valley Forge.



LAFAYETTE reviewing the citizen soldiers in Paris

Then Congress designated him as one of three commanders to lead an army to Canada.

With his characteristic vigor he started for Albany, only to discover that he was not provided with money or with a force sufficient for his purpose. He found himself in the midst of the infamous Conway cabal, and manfully stood by his chief, Washington.

The French Army of Relief

LAFAYETTE
in an interview with Louis XVI and Marie Antoinette

The treaty of alliance with France in 1778 changed Lafayette's status from that of a volunteer who had slipped away against the wishes and commands of his own king, into that of a representative of a powerful military ally, till French troops could reach the country. Lafayette continued in the American service, and the British all but bagged him at Barren Hill, where he had betaken himself in a somewhat rash reconnaissance toward Philadelphia. When the British retreated across New Jersey, Lafayette as usual pushed with all his might for an attack, manfully accepted a command under Lee, and when that officer at the battle of Monmouth traitorously attempted to cause the defeat of his own army, Lafayette stood his ground as best he could.

MAJOR-GENERAL
LAFAYETTE
From portrait by Le Vacher

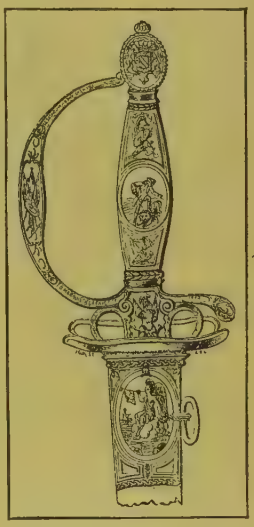
When, later in the year 1778, the French fleet under D'Estaing brought the first actual French reinforcement, Lafayette was made joint commander of the American army which was to coöperate with the French fleet in the capture of Newport. The attack failed, and Lafayette again planned an invasion of Canada, at the head of a French force, a plan contrary to Washington's policy. Meanwhile general war broke out between France and England; and in January, 1779, he returned to France, and there had a decided influence in the plans for sending

LAFAYETTE OFFERING THE TRI-COLOR COCKADE
to the Municipality of Paris, August, 1789

LAFAYETTE AND FAMILY IN PRISON AT OLMÜTZ
From a painting by Ary Scheffer

a French army as well as a naval force to the relief of the Americans, whose cause was at its darkest hour. The command of this force, which came out in 1780, was given to Rochambeau, with Lafayette, who by this time was twenty-three years old, as a sort of official representative of France, though he retained his commission in the American army and visited West Point the day before the treason of Arnold failed. Lafayette's last opportunity for personal service to the American cause was in the final and triumphant campaign against Cornwallis. In February, 1781, he again took the field at the Head of Elk in Upper Chesapeake Bay. He pledged his own credit at Baltimore for the clothing of his troops, and the shoes that were bought with the guineas borrowed by Major-General Lafayette enabled some of the marching men to aid in defending Virginia against Cornwallis. This was Lafayette's only independent command, and it prepared the way for the brilliant joint campaign of Americans and Frenchmen that ended the war. In August, 1781, the Comte de Grasse with a French fleet blocked the entrance to the Chesapeake, and thus fended off aid to the beleaguered troops of Cornwallis, who were trapped in Yorktown. Meanwhile, Washington and Rochambeau marched southward jointly, were found by Lafayette, and on October 17th Cornwallis surrendered his whole army. The war was practically over, and the twenty-four-year-old hero returned to his own country.

LANDING OF LAFAYETTE AT CASTLE GARDEN
on his visit to the United States in August, 1824. From a drawing by Imbert



LAFAYETTE'S SWORD

MEDAL PRESENTED TO LAFAYETTE
by the Twenty-seventh New York Artillery on Washington's Birthday, 1832

Lafayette the Statesman

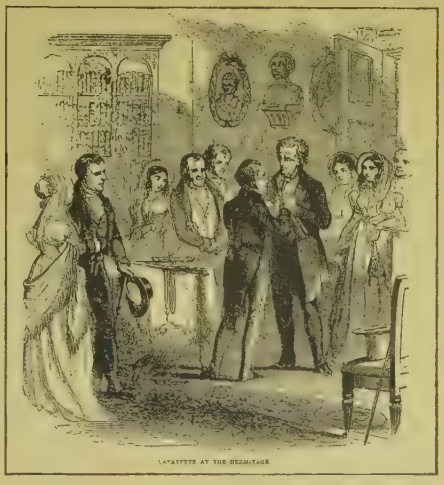
To the end of his days, Lafayette remained the friend, admirer, and defender of the United States—and, in return, he was always held as an idol in the hearts of the American people. In 1784-1785 he made a six-months' visit to this country, and was everywhere received with acclaim. Later, his experience in America was the basis of a new service to his own country, which no one else could have rendered. When the French Revolution broke out in

WATCH PRESENTED TO LAFAYETTE BY WASHINGTON

REVERSE SIDE OF THE SWORD

1789, and things American were in fashion, General Lafayette was a member of the famous States-General, where, after the taking of the Bastille, he presided for a time over the National Assembly. He was made commandant-general of the Parisian militia, and when the storm burst he attempted to protect the royal family. The Revolution speedily outran him, and though he was placed at the head of the army on the eastern frontier, the revolution government proscribed him, and in 1792 he was obliged to flee the country to save his life, and for five years was an inmate of Prussian and Austrian prisons. Escaping thence, he returned to France, but there was no place for him in the court of the rising Napoleon, and as in the case of many another French grandee and revolutionary statesman, his light seemed to be extinguished.

When the Bourbons came back to France, this general of the American Revolution and of France, this nobleman of the ancient regime, this well-wisher of Louis XVI and his ill-fated family, entered the parliamentary government of the Restoration. In America his star was still brighter, and in 1824, on the express invitation of President Monroe, Lafayette for the fourth time set sail for America. Never since the journeys of Washington from Mount Vernon to New York and from New York to New England, had there been such a triumphal tour. Two hundred thousand people welcomed him on his arrival in New York. He passed from place to place as the guest of the nation. He was received with great honors at Harvard College, visited the battlefield of Bunker Hill and paid his respects to John Adams, then nearing the end of his notable life. He returned to a ball at Castle Garden, revisited the scene of his wound at Chadd's Ford, was received in state at the national capital, and Congress substantially showed its gratitude by voting him a township of



MEETING OF LAFAYETTE AND ANDREW JACKSON
at the Hermitage, 1824

land. He took part in a celebration of the surrender at Yorktown, mourned at the tomb of Washington at Mt. Vernon, and everywhere was acclaimed as the national friend and hero.

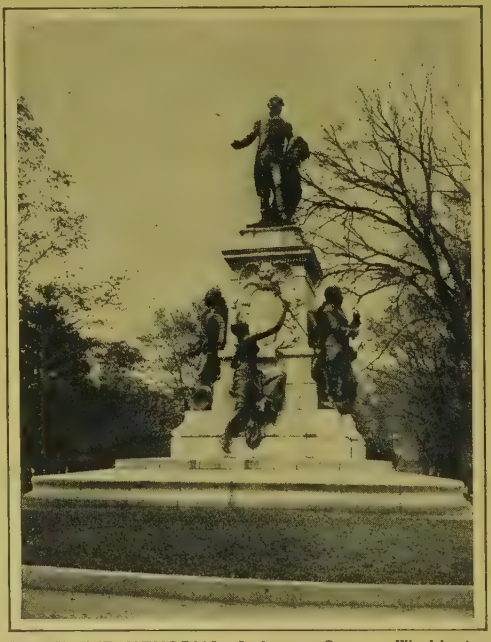
For the third time in his life Lafayette was called to stand at the head of great affairs. When in 1830 the Bourbons in France were swept out of the throne, Lafayette by common consent stepped forward as a kind of dictator for the time being; and it was through his influence that the nation accepted the Orleans Louis Philippe king. Thus in his last days he returned to the experiences of his brilliant youth as a great national figure, a councillor of kings, and a general of the people.

Giving Back to Lafayette

In these times it is fitting to remember the passionate devotion of Lafayette and many of his friends to the cause of a republic which was almost perishing under the blows of an enemy. Lafayette drew glory, fame, and the plaudits of two nations by his American service; but he began with adhesion to a cause in which he had to brave hardship, danger, and destruction. He gave his money, his years, his reputation, and he gave far more than all that—he gave his belief in the cause of the distressed American colonies, he shared their determination never to return to the mastery of an external power. It is hardly conceivable that the French Government would have furnished that aid without which the little American Republic would have perished but for the example and the entreaties of Lafayette.

Could it ever have entered the mind of the French general and states-

BARTHOLDI'S STATUE OF LAFAYETTE
Union Square, New York City. In the background is the huge wooden model battleship built for a recruiting station



LAFAYETTE MEMORIAL, Lafayette Square, Washington
This work, designed by the French sculptors, Falquiere and Mercie, was erected by Congress in memory of the noble Frenchmen who lent their aid in the Revolution. Lafayette, in bronze, surmounts the pedestal, which contains also figures of Rochambeau and Duportail, of the Army, and D'Estaing and De Grasse, of the Navy

LAFAYETTE. By Thomas Sully
In Independence Hall, Philadelphia

DECORATIONS ABOUT STATUE OF LAFAYETTE, UNION SQUARE, NEW YORK
on the occasion of the visit of Gen. Joffre and the French mission, 1917

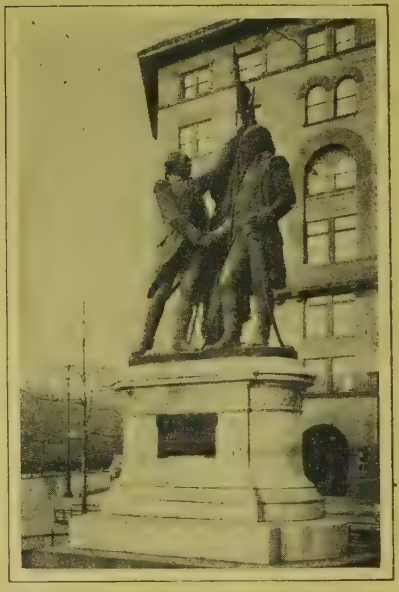
man that the time might come when the proud nation of France would need allies? When American generals, American ships and American troops would remember his warm and generous spirit, his passionate belief in the principle of free government, his willingness to do or die for the cause of another people besides his own? Some debts can never be paid to those from whom they were incurred; but grandchildren and great-grandchildren may receive the reward of services rendered by men who have long since passed into mould. Lafayette was the champion of world citizenship, of the brotherhood of republics, of the kinship of those who stand for human freedom. The man was great; the work that he did was greater. The man was long-lived, and his friendship for America has lasted for near a century after he passed from earth. In our day we seek to give back to Lafayette's countrymen something of his magnificent gifts to our fathers.

The death of Lafayette, in 1834, cast a shadow of sorrow across the surface of the civilized world. In America the expression of grief was deep-seated and sincere. Bells tolled and memorial meetings were held in many places.

Members of Congress were commanded to wear the badge of sorrow for thirty days, and thousands of the people joined them in this outward expression of the grief that filled their hearts.

From a thoughtful and intelligent student of Lafayette's career, we draw the following just estimate of his character and life accomplishment:

"His services to his own country and to America were many and valuable. But his personal example of character, integrity, and constancy was even more to America and to the world than his distinct services. What he *was* endeared him to all Americans, even more than the things he *did*.



WASHINGTON AND LAFAYETTE STATUE
Manhattan Ave. and 114th Street, New York

GENERAL PERSHING AT THE TOMB OF LAFAYETTE (1917)

He gave his whole soul in youth to his world-wide dream of freedom—freedom under a constitution guaranteeing it, through public order, to every human being. He found himself in a world where monarchial government seemed the destiny and habit of mankind. He thought it a bad habit—one that ought to be broken. Sincerely and passionately believing this, he was willing to die in the service of any people who were ready to make the struggle against the existing national traditions. He made mistakes; he made the mistake of trusting Louis Philippe. In doing this he had with him the whole French people. But let it be said on the other hand that he did not make the mistake of trusting Bonaparte, whose blandishments he resisted during the whole passage of that meteor. And he was making no mistake when, to the very end of his life, he remained true to his love for the land he had aided in his youth. His visions did not all come true in exactly the shape he devised, but to the last he retained a glorious confidence that they would ultimately be realized in full." If Lafayette lived today might he not see clearly the fulfilment of his visions in the near future?

THE CHILDREN'S STATUE OF LAFAYETTE
This statue, designed by the sculptor, Paul Wayland Bartlett, was a gift to France, in 1908, from five million American school children It stands in a court of the Louvre, Paris

SUPPLEMENTARY READING

LE GÉNÉRAL LAFAYETTE *By Etienne Charavay*
Paris, 1898. Carefully studied, and illustrated with fàcsimiles, cartoons, portraits, etc.

THE MARQUIS DE LAFAYETTE IN THE AMERICAN REVOLUTION *By Charlemagne Tower, Jr.*
The standard account of Lafayette in America, with maps.

LIFE OF LAFAYETTE (2 vols.) *By Bayard Tuckerman*

LAFAYETTE. Illustrated *By M. F. Crowe*
A popular and interesting little book.

THE TRUE STORY OF LAFAYETTE. Illustrated
A brief, graphic biography. *By E. S. Brooks*

LIFE OF LAFAYETTE *By P. C. Headley*

THE HOUSEHOLD OF THE LAFAYETTES *By Edith Sichel*

*** Information concerning these books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

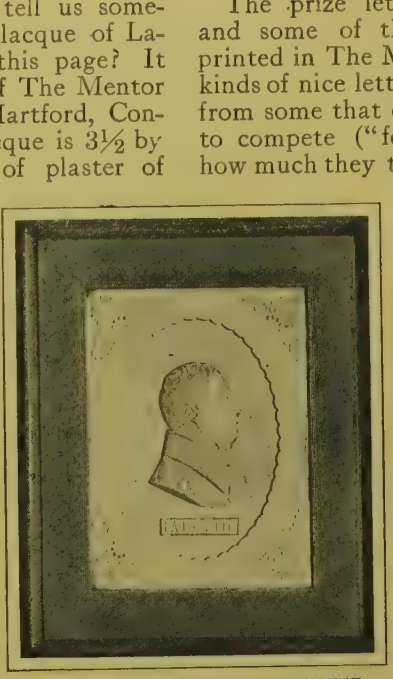
Can any of our readers tell us something about the portrait placque of Lafayette that we print on this page? It was sent in by a member of The Mentor Association who lives in Hartford, Connecticut. The original placque is 3½ by 4½ inches. It is made of plaster of Paris, and is set in a thin, wooden frame. With it came this note:

I live in a house built in 1780. This placque of Lafayette must be over 100 years old. I send it to you thinking it might be of interest at this time.

It is evidently a portrait of the mature Lafayette. The placque may have been a souvenir of the General's visiting tour in the United States in 1824.

★ ★ ★

The story of the French officer, told in the Open Letter a short time ago, brought many stirring messages in response—notably the following:



PORTRAIT PLAQUE OF LAFAYETTE

Your letter in the October issue touched me deeply—where the loyal French soldier pressed the sod to his lips and exclaimed, "For France! France!" This was the more moving to me because of the fact that one of my family had just completed a poem that touches on this theme. I am enclosing for you a copy of these verses, full of tender appeal and soul-felt loyalty, just as when that other soldier of France kissed the sod.

Perhaps I should now tell you that this poem was written by "my little chum" and granddaughter, but just twelve years old. I am sure you would never discover a child thought or expression, had I not told this. F. H. W.

THE BUGLE CALL

"Somewhere In France"

By Catherine Parmenter

Upon the bare, deserted battlefield
A wounded poilu, suffering, shaken, lay,
And on his battered cheek, with awful heat,
The sun, impassioned, spread its scorching ray.

Then, clearly ringing o'er the ruined field,
The Bugle Call resounded far and wide.
It summoned every man within its reach
To fight for Truth, lest France be crucified.

The wounded poilu heard the bugle's cry,
And in his heart he lived the battle o'er;
While his weak body fought the fight with Death,
He dimly saw, through mist, the Other Shore.

Then later, in the gray of dawn, he died:
From bitter War came sweet Deliverance;
The Bugle Call had stirred his loyal soul,
And guarded, cherished in his heart, was France.

The prize letters have been selected, and some of them have already been printed in The Mentor. We have had all kinds of nice letters from the winners, and from some that did not win but were glad to compete ("for the sake of telling us how much they thought of The Mentor"—as several of them put it). Miss Hester Fulton, one of the prize winners, has written as follows:

I am very much pleased. You ought to ask what we are going to do with our prize money. I, for one, intend to put mine away for next year's subscription to The Mentor.

A very frugal and thrifty thought, and we appreciate it. I plant Miss Fulton's suggestion here on this page as a promising little seed, hoping it may bear fruit in the minds of others.

★ ★ ★

In a recent interview William Maxwell, vice-president of the Thomas A. Edison Company, stated what he would do if he were twenty-one again. Among the items was the following:

Were I twenty-one again, I should do a great deal of reading. Six hours each week of serious reading is not much, but it may mean the difference between the $20,000 a year executive and the $25 a week clerk.

We are glad to print this from so authoritative a source, for it states in a few forcible words one of the chief advantages that we have always claimed for the Mentor Plan. Our legends have been "Learn one thing every day," "Make the spare moment count," "Turn your odd moments into gold." Could we have any better confirmation of the soundness of The Mentor contention than Mr. Maxwell's words? The way of knowledge is the way of success, and the aim and purpose of The Mentor is to give its members, in a concise and interesting way, the essential things that they should know in the various fields of knowledge. And above all, The Mentor cherishes the idea that the path of knowledge should not be one of irksome toil and tribulation, but one of joy and satisfaction.

W. D. Moffat

PHOTOGRAPH BY DAVIS & SANFORD, N. Y.

EDWARD A. MacDOWELL

IT used to be said of Liszt that he was an "idea." It might be said of Edward MacDowell that he is an "influence." Not only was he one of the first American composers to take high rank, but he had the gift of making friends, who, following his lead, have continued to put his artistic aims and theories into practice.

The MacDowell Club in New York was founded in his honor, and his country home in Peterboro, New Hampshire, has attracted an artistic summer colony, where his spirit still animates the work undertaken there.

And what were these aims?

As set forth by the MacDowell Association, they are:

"To discuss and demonstrate the principles of the arts of music, literature, the drama, painting, sculpture, and architecture; to promote a sympathetic understanding of the correlation of these arts, and to contribute to the broadening of their influence, thus carrying forward the lite purpose of Edward MacDowell."

Edward MacDowell was born in New York City, December 18, 1861. He studied the piano at an early age. One of his first teachers was Teresa Carreño, the brilliant South American pianist. In 1876 he went to Paris, studied in the Conservatoire for a while and then went to Germany. Here his particular master was Joachim Raff, composer of the Lenore Symphony and the Forest Symphony (Im Walde); and Raff's influence continued to be felt all through MacDowell's life. Liszt gave the young composer his patronage and made conservative German societies play his compositions. In 1884 MacDowell settled in Wiesbaden to teach and compose. In 1888 he returned home, living in Boston until he was called to the chair of music in Columbia University, New York, which he held for eight years. In 1905 his health began to break, and on January 24, 1908, he died in New York City.

Although he has written orchestral music—the "Suite," Opus 42, a woodland fantasy with haunted dells and forest spirits, and the "Indian Suite," being particularly admired—his most original compositions are for the piano. His sonatas are proclaimed "The best since Beethoven." His "Sonata Tragica," Opus 45; the "Sonata Eroica," Opus 50, descriptive of King Arthur, and the "Third Sonata," Opus 57, are now in the repertoire of all virtuoso pianists.

That MacDowell looked upon the piano as a poetic instrument is evidenced by the numerous short pieces that he wrote for it. As their titles show, these were little poems, moods, and impressions, not written to display the instrument, but to reveal the inmost thoughts of the composer.

Two concertos for the piano with orchestra require, however, great virtuosity from the performer.

Songs constitute about a third of his work. He wrote no symphonies, no overtures, no string quartets, no cantatas.

Of MacDowell, Lawrence Gilman writes:

"His music is redolent of the breath and odor of woodland places, of leaves and moors and gardens; or it is saturated with salt spray; or it communicates the incommunicable in its voicing of that indefinable and evanescent sense of association which is evoked by certain aspects, certain phases of the outer world—that sudden emotion of things past and irrecoverable which may cling about a field at sunset, or a quiet street at dusk, or a sudden intimation of spring in the scent of lilacs.

"But although such themes as he loved to dwell upon in his celebration of the magic of the natural world were very precious to his imagination, the human spectacle held for him from the first an emotion scarcely less swift and abundant. His scope is comprehensive; he can voice the archest gaiety; a naive and charming humor, as in the 'Marionettes' and in the songs 'From an Old Garden'; there is passion in the symphonic poems and in many of the songs; while in the sonatas and in the 'Indian Suite' the tragic note is struck with impressive and indubitable authority."

In 1896 he bought a piece of property near Peterboro, New Hampshire, consisting of arable land and forest. Here he spent his summers till the end came. Most of his later music was written in a log cabin, which he built in the woods. In fact, the very last music he wrote was entitled "From a Log Cabin," and bore these lines of his own:

"A house of dreams untold
It looks out over the whispering tree-tops
And faces the setting sun."

This legend has been placed by his tomb in Peterboro.

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HENRY KIMBALL HADLEY is one of the youngest of the American musicians that masters orchestration. He was born in Somerville, Massachusetts, in 1871, the son of Henry Hadley, supervisor of music in the public schools of Somerville and conductor of the Winchester (amateur) orchestra. The latter says of this son:

"He wrote music from the time that he could read, or sooner. He often helped me out while he was still a boy, rehearsing the school choruses, and once when I was suddenly taken ill, he took a graduation performance in charge, involving the direction at a moment's notice of a large chorus and an orchestra. But for that matter, he learned to conduct at home before he ever took a *baton* in his hands in public. We often had musical evenings. Henry soon found that a great deal of music could be arranged for different instruments, and he would arrange everything from a modern symphony or symphonic poem down. Then he would conduct and make the rest of us work.

"Then we had quartet evenings. Henry Hadley, junior, was first violin; Henry Gilbert of Cambridge, the other composer that we're all so proud of, was second violin; I played the viola; at first Frank Porter and then my son Arthur took the 'cello part. Henry has a born gift for instrumentation, but I question how far this would have carried him had he not seen so much of orchestras and scores. He seemed to know instinctively how things would sound, and he was always having occasion to put his gifts into use, composing, arranging, conducting when he was in his teens. He was always composing or working at something in the musical line."

Young Hadley studied music in Boston, counting among his teachers Stephen A. Emery and George W. Chadwick, and in 1894 he went to Vienna to study composition with Mandyczewski. Returning home in 1896, he took charge of the music in St. Paul's School, Garden City, Long Island. Anton Seidl conducted Hadley's first symphony in 1897; and ever since that date Hadley's name has figured on important programs. He delights in the larger forms, such as symphonic poems, orchestral cantatas, symphonies, and overtures. His compositions frequently win prizes and find their way into the orchestral repertoire. His symphonies include "The Seasons," "Youth and Life," and "North, East, South and West"; his overtures, "Hector and Andromache," "In Bohemia," and "Herod"; his cantatas, "In Music's Praise," "Lelewala," a legend of Niagara, and "The Fate of Princess Kiyo"; and his symphonic poems, "Salome" and "The Culprit Fay."

A one-act opera, "Safie," was brought out in Europe with success, and the "Atonement of Pan," written for the Bohemian Club of San Francisco, and presented in the famous redwood grove on August 10, 1912, is another. David Bispham, who played Pan, wrote of it as follows:

"Beginning with the prologue the music is of a most grateful character, for Pan in his gentler mood, while his denunciations of Orion and Selenus are masterful in their original phrases. The prayer to Diana in the second act is a noble, lofty piece of writing for the voice. The male choruses are strong; the dance music of the nymphs is enchanting; while the flight of the harpies is a most original piece of orchestration. The concluding music, in which Pan makes his atonement, is a splendid outburst and a worthy finale to an extremely fine work."

"Merlin and Vivian" he calls a lyric drama for solos, chorus, and orchestra.

Mr. Hadley has also written chamber-music, a violin sonata, piano music, and many songs, the most popular one of which is "I Plucked a Quill from Cupid's Wing."

Mr. Hadley has been, for some time, conductor of the San Francisco Symphony Orchestra.

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HORATIO W. PARKER

WITH a good list of piano compositions, songs, cantatas, and orchestral compositions to his credit, the name of Horatio W. Parker was lifted into particular prominence by his religious work, "Hora Novissima," a setting of the old poem written by Bernard de Morlaix, Abbe of Chiny, in the twelfth century. It was first sung in Trinity Church, New York, in 1893. In 1899 the composer was invited to conduct it at the Worcester Musical Festival in England. This was the first time that the work of an American had ever been given at any English festival. Mr. Parker and his work made such a great impression that Cambridge gave him a degree of Doctor of Music, and he was immediately commissioned to compose a work for the Hereford Festival.

It is perhaps in sacred music that Mr Parker is at his best. His "Legend of Saint Christopher"; "Wanderer's Psalm"; complete Morning and Evening Service for the Holy Communion; "Shepherd's Vision," a Christmas cantata for soprano solo, chorus and orchestra; and "Adstant Angelorum Chori," a motet for chorus without accompaniment (which gained the prize from the Musical Art Society in 1898) have one and all attracted the highest praise from critics.

One might say that his piano compositions and secular songs are his recreations from more serious work. Although he has written symphonies, suites, and concert overtures for the orchestra, he seems to need the presence of voices to accomplish his best work. For instance, his "King Trojan," a ballad for chorus and orchestra; "The Normans," for chorus and orchestra; "The Kobolds," for chorus and orchestra; "Harold Harfager," for chorus and orchestra; and the cantatas already mentioned, are his most successful works after his religious utterances.

His style has been well summed up by Rupert Hughes, who says:

"Parker is rather old-fashioned in his forms of musical speech. That is, he has what you might call the narrative style. He follows his theme as an absorbing plot, engaging enough in its plot, without gorgeous digressions. His work has something of the Italian method. A melody or a theme, he seems to think, is only marred by abstruse harmony, and is endangered by diversions."

Horatio William Parker was born in Auburndale, near Boston, Massachusetts, September 15, 1863. His father was a prominent architect in Boston, and his mother was an organist and a woman of literary accomplishment. She gave him his first musical education. After studying with Stephen A. Emery, John Orth, and George W. Chadwick in Boston, young Parker followed in Chadwick's footsteps and went to Munich to study under Rheinberger. After three years in Europe, he returned home, became director of the music in St. Paul's School, Garden City, Long Island, and in 1894 Battell Professor of Music at Yale.

Mr. Parker has tried his hand at every kind of composition, and has been fortunate in winning prizes in all forms. Whenever he tries for a prize, he generally gets it. His first opera, "Mona," was a prize work, and so was his last opera, "Fairyland," which won $10,000. This was performed with great success in Los Angeles, California, in the summer of 1915.

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GEORGE W. CHADWICK

THE name of George W. Chadwick became known to concert-goers many years ago when American composers seldom appeared on our programs. The Boston Symphony early welcomed Mr. Chadwick's works, and Theodore Thomas also placed them in the repertoire of the Chicago Orchestra. They had to stand the test of direct comparison with classic compositions and of works by recognized modern masters. This they did.

Mr. Chadwick's work is solid and scholarly, and he has full command of all the orchestral voices. Indeed, the orchestra is his favorite method of expression. A very characteristic work of Mr. Chadwick's is his symphonic poem, "Aphrodite," produced in 1912. The idea of the work was suggested by a beautiful head of the goddess Venus found at Cnidus in Asia Minor, and now in the Boston Art Museum.

"The composition," writes a critic, "endeavors to portray the scene that might have taken place before such a statue when worshipped in its temple by the sea. There are festal dances; a storm at sea; the thanks of rescued mariners to their patron goddess; religious services in the temple; and other suggestions of a similar nature. All these are woven into the score with a skill and musicianship that obtain beautiful effects and bear full witness to the composer's gifts."

George Whitfield Chadwick was born in Lowell, Massachusetts, November 13, 1854. After studying in Boston and teaching for a time, he went, in 1877, to Germany to complete his musical education. He studied two years in Leipsic with Jadassohn and Reinecke, and then in Munich for another year under Rheinberger. Returning to Boston in 1880, he soon became an important personality in the musical life of that city as organist, teacher, conductor, and composer. Although he has written many excellent pieces for the piano and many songs and part-songs, it is in the large orchestral forms that Mr. Chadwick's genius delights to dwell. His concert overtures have been particularly successful. "Melpomene," for instance (1887), is considered one of the most important of American orchestral works. It is a prologue to an imaginary tragedy, as his "Thalia" overture (1883) was a prologue to an imaginary comedy.

These two classical overtures were joined in latter years by a third overture, "Euterpe," inspired by the Muse of History.

A pathetic overture entitled "Adonais," in memory of a friend, came next in 1900.

A complete list of Mr. Chadwick's works proves a life of great industry and fine achievement. It includes a "Symphony in F"; a "Symphony in B-flat"; a "Symphony in C"; an "Andante" for string orchestra; a "Suite Symphonique in E-flat"; "Judith," a lyric drama for soli, chorus and orchestra; "Lovely Rosabelle," ballad for chorus and orchestra; "Noël," a Christmas pastoral for soli, chorus and orchestra; "Phœnix Expirans," hymn for soli, chorus and orchestra; the "Lily Nymph," a cantata; "Cleopatra," a symphonic poem; and "Aphrodite," a symphonic fantasie, described above. Mr. Chadwick's list of chamber music, pianoforte music, and vocal music is also large.

His works are frequently played at our musical festivals, the composer conducting.

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PHOTOGRAPH BY DUDLEY HOYT, N. Y.

REGINALD DE KOVEN

SOMETIMES a composition becomes so famous that it is even more widely known than the composer himself, and when the composer's name is mentioned in connection with that composition somebody present exclaims: "Oh, did *he* write *that?*" Such is the case with a song that, introduced in the opera of "Robin Hood," made the tour of the world in 1890. This song was "O Promise Me."

"Robin Hood" was one of the most popular comic operas that was ever written. It was first produced in Chicago in 1890 and it reached London in 1891. It was the first opera by an American composer that was ever presented in London; and in that city, where comic opera is a cult (made popular by the works of Gilbert and Sullivan), "Robin Hood" captured the critical public instantly.

Reginald De Koven was born in Middletown, Connecticut, April 3, 1861. He was a favored child of fortune. At the age of eleven he was taken abroad, and he lived in Europe for twelve years. He earned a degree at Oxford with honors; he studied music in Germany and Italy; and, turning his thoughts to light opera, he studied under those masters of this form of music, Genee and Von Suppe. In 1882 he settled in Chicago; but afterwards he removed to New York, where he now resides.

Although he has written orchestral suites and pianoforte sonatas, it is upon his operas and upon his songs and ballads that De Koven's fame rests. His setting of Eugene Field's "Songs of Childhood" would have attracted popular attention to him even if he had composed nothing else. His version of "My Love is Like a Red, Red Rose," and his ballad, "In June," as well as Shelley's "Indian Love Song," have long been recognized as standard compositions. His first opera, "Cupid, Hymen & Co.," was never produced, so "The Begum," first presented in Philadelphia in 1887, usually stands at the head of the genial, tuneful and refined works that have come from his hand.

"Don Quixote," played in Boston in 1889, was soon laid aside for "Robin Hood," that appearing in 1890, took the country by storm. In 1903 Mr. De Koven completed his twenty-third opera, "Red Feather," which he described as "'Robin Hood' up to date." In that year he also had a record of two hundred songs! His operatic works include "The Fencing-master," "Rob Roy," "The Highwayman," "Maid Marian," "The Wedding Trip," and many others. "The Canterbury Pilgrims," an opera composed on larger lines, was presented at the Metropolitan Opera House, March 8, 1917. For this work Percy Mackaye wrote the libretto.

Mr. De Koven is fond of saying: "I hold that the music of Offenbach will live as long as that of Wagner;" and, with the exception of music critics, most people agree with him.

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PHOTOGRAPH BY WHITE, N. Y.

VICTOR HERBERT

OLD concert-goers who remember the Seidl orchestra also remember Seidl's first 'cellist, who seemed to be the life and soul of that vital and brilliant organization. This first 'cellist was Victor Herbert; and not only did he astonish the eye and ear of spectators and listeners by his amazing technique, so airily tossed off his bow, and by the luscious tones of his instrument, but his genial nature, which seemed to radiate good spirits throughout the entire orchestra, also attracted their attention.

Victor Herbert owes this bright and lively temperament to his Celtic blood. Moreover, Victor Herbert is not only an Irishman, but he is the grandson of the famous Irish story-writer Samuel Lover. It is, therefore, perfectly natural and logical that he should have inherited an unusual fund of humor, which eventually found expression in the field of musical comedy and light opera.

Victor Herbert was born in Dublin, February 8, 1859, and was educated in Germany, whither his mother took him at an early age on the death of his father. He practically forgot all his English; and when he arrived in New York to become the first 'cellist of Seidl's orchestra, many persons indeed thought that he was a German musician. His playing soon became popular, for his style was most original and delightful.

At a later period, as conductor of the Pittsburg Orchestra, he showed especial qualifications for wielding the *baton*. But the double reputation as virtuoso-violoncellist and star-conductor was not sufficient for Mr. Herbert's ambition; and so he began to bring out one light opera after another with astonishing rapidity. His list now includes forty or more.

Most of these are solidly written and musicianly works, with fine orchestration and a fund of sparkling melody.

Mr. Herbert's operas have met with such success that his name will probably go down in musical history as a composer rather than as a 'cellist or conductor.

His most popular operas are: "Natoma," "Madeleine," "Sweethearts," "The Tattooed Man," "The Viceroy," "The Idols Eye," "The Wizard of the Nile," "Babes in Toyland," and "It Happened in Nordland." Other operas that met with success are "Prince Ananias," "The Ameer," "Babette," "Cyrano de Bergerac," "The Enchantress," "The Fortune-Teller," "Little Nemo," "The Red Mill," "The Rose of Algeria," "The Serenade," "The Singing Girl," "When Sweet Sixteen," and "Wonderland."

A critic aptly says: "His craftsmanship and his dexterous manipulation of technical resources are probably unsurpassed by any American musician of today. His sensitiveness to contemporary technical advancement is apparent in his light operas, which in fascination of harmony and richness of color maintain a steady advance from year to year.

"The light opera manner in its truest form is an integral part of Mr. Herbert's musical nature. His characteristic utterance is in its way as distinctive, as individual, and as free as that of every great foreign composer from Strauss to Arthur Sullivan. His melodic flow is facile, superabundant, and generally original." Mr. Herbert has also written a "Suite Romantique" for full orchestra which has been played by the Philharmonic Society; much excellent music for the violoncello; and incidental music to Shakespeare's "Midsummer Night's Dream."

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AMERICAN COMPOSERS

By W. J. HENDERSON

Music Critic of The New York Sun. Author of "The Orchestra and Orchestral Music," "The Story of Music," Etc.

MENTOR GRAVURES

EDWARD A. MACDOWELL

HORATIO PARKER

HENRY HADLEY

HORATIO PARKER (1863)

MENTOR GRAVURES

GEORGE W. CHADWICK

REGINALD De KOVEN

VICTOR HERBERT

THE history of musical art in the United States is still young. Concerts we have had since Revolutionary times, and Italian opera since Manuel Garcia brought his company here in 1825; but music of our own make, and possessing true distinction, belongs for the most part to recent years. The country is still juvenile in its outlook. It still lacks the unity of thought and feeling that belongs to a nation. It has been intensely occupied with material development. And, most important of all, it has been without those deep-laid musical foundations on which rests the art of Italy, France, Russia, and Germany. All the European nations have had their own wild flowers of music to cultivate; we have had to import our plants. They have music which has grown up among their peoples, and which is a natural and powerful expression of their national life. We have only the Southern Negro and the Indian to offer as a musical basis, and neither has any direct relation to the slowly shaping spirit of our great national existence.

Our earliest composers are buried in oblivion. Those pioneers that still live in the histories strove principally to naturalize here the forms and methods of the great Teutonic masters. The string quartet and the symphony, as written by Haydn and Mozart, were their models. The

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Parker. In recent years Mr. Parker, who is Professor of Music in Yale University, has striven to reach the ear of the general public by way of the stage. His opera "Mona" won the $10,000 prize offered by the Metropolitan Opera House, and was produced at that institution in 1912. He subsequently wrote "Fairyland," which was presented in San Francisco. Nevertheless, his best creations are in other departments, and his "Hora Novissima" (1893), a religious cantata for solo voices, chorus, and orchestra, remains his masterpiece. Uneven in merit, it contains some of the noblest music ever written by an American composer. Indeed, some of the great choruses would have been triumphs for an ecclesiastical master of any period. Mr. Parker has also composed many songs, some exceptionally good; some pleasing piano music; some very good organ music, and an interesting "Morning and Evening Service for Holy Communion."

ETHELBERT NEVIN (1862-1901)
One of the most popular and successful of American composers. His best known song is "The Rosary"

Frank van der Stucken, born in Texas in 1858, was never associated with the New England coterie, but was none the less an exponent of the German classic forms. He lived abroad much of his early life, and won warm praise from Grieg, Liszt, and others. After coming home to conduct the Arion Maennerchor of New York, he directed concerts of American music, and later became conductor of the Cincinnati Orchestra. His most important compositions are his symphonic prologue to "William Ratcliffe," brought out by Liszt at Weimar, Germany, and his music to Shakespeare's "Tempest." But his songs are good, and his orchestral music shows a firm command of the technic of composition.

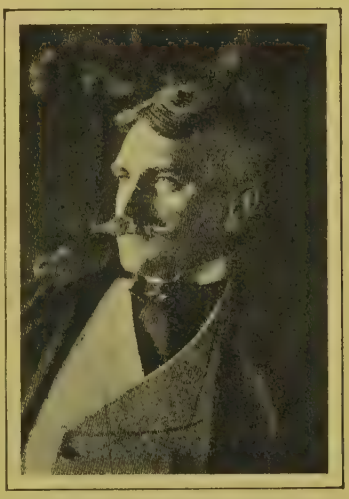
JOHN POWELL (1882—)

HARVEY WORTHINGTON LOOMIS (1865—)
Known by many dramatic musical compositions and his arrangements of American Indian music

Edward MacDowell

Edward MacDowell left behind him a modest total of compositions with a substantial mass of quality. Readers of musical commentary must

have been puzzled by the variety of opinions expressed in regard to the value of Mr. MacDowell's art. The cause of the disagreement has been the partisan eagerness of his admirers to claim supreme greatness for everything he wrote. Like other masters, he composed some poor stuff; but his best is incontestably beautiful and even noble, and will probably live long to win respect for American music. He went abroad to study, and after leaving the Paris Conservatoire had the good fortune to win the interest of Joachim Raff, a German composer, whose romantic tendencies taught him how to put new wine into the old bottles of the classic forms; and later of Franz Liszt, who built the bridge between the symphony and the "tone poem" as now written by such masters as Richard Strauss. MacDowell was a man of solitary intellectual habits, given to self-communion and poetic brooding. Raff and Liszt helped him on the way toward freedom of expression. His music was heard in Europe before it was known in the United States.



HARRY ROWE SHELLEY (1858—)
A distinguished musician, organist, instructor in harmony, and composer of many celebrated songs and sacred compositions

WILLIAM H. SHERWOOD (1854—)
Celebrated pianist and composer

FREDERICK S. CONVERSE (1871—)

Mr. MacDowell's songs are now infrequently heard, except the ever popular "The Robin Sings in the Apple Tree." His shorter piano pieces, most of which are descriptive and have fanciful or poetic titles, have also been much neglected. His orchestral compositions, which have much value, are permitted to have occasional hearings. Among these is the "Indian Suite," which is one of the composer's best creations and one of the loveliest of all American orchestral works. In it Indian themes are heard, and there is a distinctly significant effort to give a local color to the music.

Without doubt, however, MacDowell's genius reached its most complete and convincing expression in his four piano works in sonata form, bearing the descriptive titles, "Tragica," "Eroica," "Keltic," and "Norse." These mark

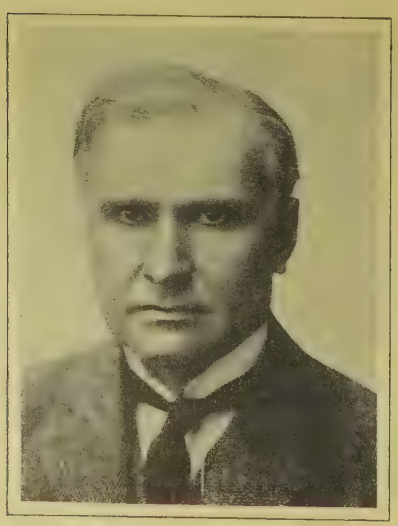
the composer's brilliant advance along the path indicated by Raff's "In the Forest" symphony. They disclose the finest and rarest traits of MacDowell's delicate spirit. They are beautiful as music, and they are imaginative in content. They belong to the small list of American compositions that speak the universal language of music.

ERNEST H. SCHELLING (1876—)
A popular pianist as well as composer

Edgar Stillman Kelley has attracted attention by his orchestral suite entitled "Aladdin" and his "Macbeth" music. The former is descriptive writing of the modern type, while the latter is built on classic lines.

Harry Rowe Shelley has composed much excellent church music, and his cantata, "Vexilla Regis," ranks as one of the best works of its type produced in this country. Naturally, there is no especial Americanism in such music, nor in Shelley's orchestral suites, which Theodore Thomas was fond of playing; but they have solid merit.

ERNEST RICHARD KROEGER
(1862—)



WALTER DAMROSCH (1862—)
The distinguished orchestra conductor, and composer of the operas "The Scarlet Letter" and "Cyrano"

Herbert and De Koven

Before we turn to the younger writers the names of the familiar composers of operetta, Victor Herbert and Reginald De Koven, may be added to the list. Herbert, to be sure, was born in Dublin, in 1859, but his career has been wholly American. His operettas, especially "The Serenade" and "The Fortune Teller," disclose fine musical scholarship as well as fertility in melodic invention. But Mr. Herbert has also written much serious music. His "American Fantasia" for orchestra is better known, perhaps, than his admirable suite and his excellent violoncello concerto. His operas "Natoma" and "Madeleine," the latter a

HENRY HOLDEN HUSS (1862—)

CHARLES W. CADMAN (1881—)

one-act piece, have had numerous performances, and in the last act of the former the composer has risen to a height of great beauty and eloquence.

Mr. De Koven's "Robin Hood" is a classic of operetta, but his "Rob Roy" and his "Highwayman" are just as melodious and well constructed. In the field of the song Mr. De Koven has been generally successful. His opera "The Canterbury Pilgrims" was produced in 1917 at the Metropolitan Opera House, and found to show all its composer's characteristic style in fluent tunefulness and grace.

Henry Hadley

If we turn now to the younger generation of American composers, we shall quickly find the name of Henry Hadley appears on concert programs a little oftener than any other. Mr. Hadley has conducted opera in two European opera houses, and has had operas performed in them. But he is best known here by his songs and his restless, energetic orchestral compositions. His symphonies bear the titles, "Youth and Life," "The Seasons," and "North, East, South, West," which show the outreaching of a spirit striving to employ the old classic patterns for delineative purposes, as Raff did in his "In the Forest." At the Worcester, Massachusetts, festival of last October Mr. Hadley's setting of Dr. Henry van Dyke's "Ode to Music" had its first hearing. Several of the musician's works have been written for and first heard at the famous Norfolk, Connecticut, festivals. An opera from his pen is at this writing announced for production by the Chicago Opera Company.

Frederick Shepard Converse is another

JOHN PHILIP SOUSA (1856—)
World famous band master, and composer of many stirring marches and several operas

who follows the romantic banner. His opera, "The Pipe of Desire," given at the Metropolitan Opera House, and his symphonic works, "The Mystic Trumpeter" and "Ormazd," all sought their materials in the land of legend and dream. Charles Wakefield Cadman, a native of Pennsylvania, is regarded as a California composer by reason of his long residence in Los Angeles. His mind has been occupied largely with Indian music, and his most popular song, "From the Land of the Sky Blue Water," belongs to a set of four Indian lyrics. He has composed a short Indian opera, called "The Robin Woman," which is announced for production at the Metropolitan House, New York.

BIRTHPLACE OF HORATIO PARKER
Auburndale, Mass.

WHERE VICTOR HERBERT SPENT HIS EARLY DAYS
The home of the famous Irish novelist, Samuel Lover, at Sevenoaks, Kent, near London. Lover was Herbert's grandfather

Powell and Carpenter

Two musicians of the latest period are John Powell and John Alden Carpenter. The former is a son of Virginia and the latter of Illinois. Both, however, have sounded individual notes, and both are in a somewhat elusive, but none the less discernible way, singers of the American ideas.

REGINALD De KOVEN (1861—)
From a photograph taken in youth

Mr. Powell has, perhaps, made the more determined effort to be national, and has succeeded in this at the expense of musical spontaneity. In his "Sonata Virginianesque" for piano and violin he intimates his purpose by the titles of his three movements, "In the Quarters," "In the Woods," "In the Big House —Virginia Reel." He sets out to delineate life on a plantation, and, of course, utilizes Negro melodies. He has also composed a very long and serious sonata entitled "Teutonic," by which he means to embrace all the nations of Northwest Europe sprung from Gothic stock. Mr. Powell is an artist of very

high ideals and music lovers expect much of him.

Mr. Carpenter is vice-president of George B. Carpenter & Co., of Chicago, dealers in railroad and ship supplies. In music he studied under Paine while at Harvard, and later under Sir Edward Elgar and others. He is a composer whose creations possess genuine individuality and fine artistic fiber. His songs are widely sung, especially the deeply felt and poetic "Green River," and in his sonata for piano and violin he has challenged the attention of musicians all over the country. Nothing else so original and delightful as his orchestral suite, "Adventures in a Perambulator," has come from his pen. It is an orchestral companion to Schumann's exquisite set of songs called "Scenes of Childhood." The movements are entitled "En Voiture" (In a Carriage), "The Policeman," "The Hurdy Gurdy," "The Lake," "Dogs," and "Dreams," which will give the reader a hint of the pictures in the baby's mind, musically embodied by Mr. Carpenter with captivating humor and fancy, and with a master's command of the modern orchestra.

EDGAR STILLMAN KELLEY
(1857—)
Composer of music for "Macbeth," and the opera "Puritania." His music shows great culture and fine taste

VICTOR HERBERT
At ten years of age

Still other American composers must be included in the list because of certain features that set their writings apart from those of the general mass. Mrs. H. H. A. Beach claims a place beside the men by reason of her elevated ideals, her vigorous conceptions, and her competent workmanship. She was chosen to write a "Jubilate" for the opening of the Woman's Building at the Columbian Exposition, and she produced a work of innate power and external beauty. Other important works are a mass in E flat, written before she was twenty-three, a sonata for piano and violin, and a "Gaelic" symphony. Mrs. Beach is known to thousands of her countrymen by her pretty song, "The Years at the Spring."

VICTOR HERBERT (1859—)
From photograph showing him as a violoncellist in Seidl's orchestra

John Philip Sousa claims recognition among our musicians because his military marches are original, spirited, and quite American in character.

MRS. H. H. A. BEACH (1867—)
A distinguished woman composer, known by musical works of maturity, dignity and power

MARGARET RUTHVEN LANG
(1867—)
Composer of many admirable songs—notably several produced for children

FRANK J. VAN DER STUCKEN
(1858—)

Henry T. Burleigh (born at Erie, Pennsylvania, in 1867) is the foremost composer of the colored race in this country. His compositions are almost exclusively songs, and he has made a specialty of the "Negro spiritual." To this creation of the soul of his race Mr. Burleigh has applied a profound musicianship and a poetic imagination. It is chiefly due to his fine lyrics of this type that the composition of songs in imitation of the "spirituals" of the former slaves has had a rapid spread through the country. Mr. Burleigh has also composed songs having an oriental flavor. His "Saracen Love Songs" are particularly well done, but have no distinctive Americanism as his Negro songs have.

Photograph by Matzene, Chicago, Ill.
JOHN ALDEN CARPENTER
(1876—)

Henry F. Gilbert must also be mentioned as one who has endeavored to be American in his music. His compositions include a comedy overture on Negro themes, five Indian scenes for piano, "The Island of the Fay" after Poe, for piano, and a fantastic orchestral work called "The Dance in Place Congo."

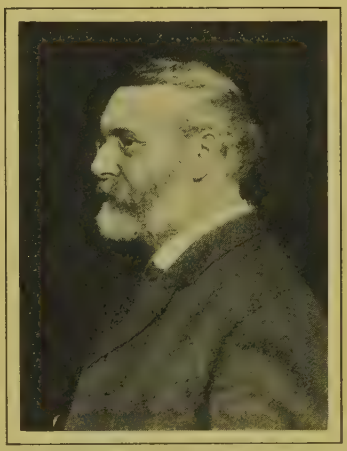
★ ★ ★ ★ ★ ★

A retrospect of what has been presented in this article should convince the reader that the history of American music has barely begun. It is possible that the world war will mark the beginning of a new era for a reason given at the beginning of this survey. American musicians have habitually gone to Europe to study. A certain amount of preparatory work having been done at home, the young musician would hasten to European music centers to saturate himself with the musical learning of foreign masters. In all these places the schools were and still are efficient academies for the training of men in the rules of composition as laid down in the music text books.

The examples held up for imitation are the classic works of the famous masters,—not the works in which impetuous imagination has shattered old formulas and from the fragments made its new shapes of beauty, but those in which all the sacred traditions have been safely and dryly housed. Such training has indisputable value, but its tendency is to discourage originality and lead the youthful writer to fear incorrectness most of all things. The works of our composers show very clearly the struggles of eager young men to express themselves, but always with a deep veneration for

the methods of Bach, Beethoven and Brahms. Naturally, they could not have better models.

But it is one thing to create great music and put it into an old form, and another to regard the form as an essential. Brahms wrote symphonies in precisely the same form as Beethoven; but they are masterpieces, regarded by connoisseurs as the only symphonic works capable of standing beside those of the immortal Beethoven. Doubtless, if a Brahms were to be born in the United States, he would be able to say anything he desired, and still follow the rules laid down by music authority. In other words, no American has yet appeared who has shown himself equal to rising above his teaching.



ADOLPH M. FOERSTER (1854—)
A composer of many beautiful piano pieces, who gives distinction to the musical life of Pittsburg

Those that have tried most earnestly to sound the native note have followed advice given by the famous Bohemian composer, Antonin Dvořák (vor'-shock), who lived for several years in this country. He asserted that materials for distinctively national music were to be found in the chants of the Indians and the songs of the Negroes. He offered a demonstration in the shape of his E minor symphony, "From the New World." Straightway scores of young American musicians began to write pieces in which the melodies were either Indian or Negro, or original imitations of them. But the fundamental point that escaped their notice was that while the hand was the hand of Ojibway, or the slave, the voice was the voice of Leipsic or Dresden. They were doing the old familiar thing, in spite of their new materials. Dr. Dvořák's E minor symphony is by no means all Negro or Indian, and parts which are not are just as fine music as those which are; and the whole thing is coherent.

It would be impossible to make anything resembling a safe prediction as to the standing which will be accorded twenty years hence to the composers mentioned in this article. The historian of music has no such difficulty when he writes of the national arts of Europe. The past is large enough to be set apart from the present. No matter what the future may think of Richard Strauss, the places of Bach, Beethoven, Wagner, Brahms, and several other masters are fixed. But the case of American composers is far different.

WILSON G. SMITH (1855—)
In the garden of his home, Cleveland, Ohio. Mr. Smith has composed many popular piano pieces and songs

The art of composition must be regarded as yet in its childhood in this country. The men that were writing fifty years ago are practically all forgotten. The commentators are still wrangling over the works of their successors.

In so far, then, as this article has suggested any rank that may be accorded to a composer, it must be viewed as offering only the general opinion of the present. The experimental stage of American composition has not yet been passed, and nothing very definite can be expected until it has passed.

SUPPLEMENTARY READING

AMERICAN COMPOSERS. A Study of the Music of this Country. Illustrated. *By Rupert Hughes* With additional chapters by Arthur Elson.

THE NATIONAL MUSIC OF AMERICA AND ITS SOURCES *By Louis C. Elson* A work for general reader as well as student.

*** Information concerning these books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

When I was a small boy I loved to listen to the singing of the negroes around the place in my home town. I took strongly to music from the beginning. So it was only natural that I should seek the keyboard of the piano even when I was so small that I had to be lifted up to reach it. I was taught to pick out with childish fingers selections from the standard operas—also a few romantic pieces, like "Monastery Bells" and "The Bohemian Chant." But I was always glad to get away to the kitchen yard and hear old Addison and Eliza sing "Roll, Jordan, Roll," "Swing Low, Sweet Chariot," "Suanee River," "Old Kentucky Home," and "When Gabriel Blows His Horn." I could never resist the plaintive little break of the voice in the line "When Gabriel Blow-ow-ows—*uh*" (there came the break) "his-*uh*" (there another break) "horn." I would sit open-eyed and open-mouthed listening to old Addison chanting that quaint refrain, and when the quavering little break would come in the melody, I would thrill to the weird effect of it, for, instinctively, I caught in it an echo of the race spirit. "Do that just alone," I said one day. "It's so queer and shivery." "Bless yo, chile," Addison said, "Dat cahn't be done. Dat's emoshun. Dat break has got to come when de heart is full and ready to break." So I learned from the lips of Addison that music with him was very much a matter of emotion—an intuitive expression, an art that knew not itself, an instinctive spirit-cry of his people.

★ ★ ★

As I grew up and learned more of music, I found that what I heard in music centers was largely the kind of music that I had been taught to pick out with my youthful fingers on the piano—a music product, lovely in itself, but not of this soil. It was the kind of music that we dressed up for, and went and listened to under social auspices, in select recitals, in concert halls, or in great auditoriums, or else in the "glittering horseshoe" of the Metropolitan Opera House. We were the American hosts and hostesses that entertained—sometimes at great expense—the musical composers and performers of Europe; and we developed our musical tastes and talents under European tuition, and expressed our musical natures in European terms. Our own native American singers, in some cases, even adopted European names.

★ ★ ★

But the music that had drawn me to the yard—the music of old Addison and Eliza—was a music wild flower, uncultivated. It is true that it has found concert expression in the Jubilee Singers that have come from the South, but it is essentially folk music and sung chiefly by the people. And, with a few exceptions such as MacDowell's "Indian Suite," no noteworthy attempt has been made to develop native material into any of the higher forms of musical composition. Dvořák, the famous Bohemian composer, when he was in America, recognized the simple beauty of these folk songs. But when he produced his so-called "American Symphony" we found that, though several of his musical themes were American in spirit, his treatment of them was European.

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The wealth of material is here. The wild flowers of music are ours—the music of the Indian, the Negro, and the country folk. It is the same kind of material that the great music composers of Europe drew their inspiration from—the folk songs and dances of their native land. When will our composers assert themselves nationally in music? When will we have native musicians who will forego foreign training and foreign influences, and build their art on our own soil—drawing their inspiration from original American music, and developing it into original American forms of musical expression? Russia has done it within the last fifty years, and Europe and America have come to know Russian national music. When will Europe come to know American national music? Sousa has delivered the message of the American military march to the whole world, and our rapid-fire, syncopated songs and dances have found popular recognition and acceptance in Europe and South America. But the time must surely come when the sweetest and finest flowering of native American music will be found in compositions that will be enduring expressions of our national spirit.

W. D. Moffat

EDITOR

IN THE LUXEMBOURG MUSEUM, PARIS THE CARDINAL LAVIGERIE, BY LEON BONNAT

LUXEMBOURG GALLERY

"The Cardinal Lavigerie"—Leon Bonnat

ONE

THIS striking portrait is large (7½ x 5 feet). It is a masterpiece both as regards technic and as being a likeness of the Cardinal, who was Private of Africa and Archbishop of Carthage and Algeria. If we may judge from Bonnat, he was, himself, impressed with his own importance. Although Bonnat has painted almost every kind of subject, it is as a portrait painter that he is best known. His drawing is masterly; his touch sure; his coloring superb; and, in addition to these qualities, he puts life into his portraits and always catches the likeness. No wonder, then, that Bonnat has been for years the favorite painter of millionaires and of celebrities. Some of the greatest men of the nineteenth century have sat to him; and, by means of his truthful and discerning brush, posterity will be able to form a very correct idea as to the personality of Victor Hugo, Thiers, Grévy, Renan, Jules Ferry, Félix Faure, Alexandre Dumas, fils, the Duc d'Aumale, Puvis de Chavannes, and many others.

He usually prefers to paint his subjects full length: standing or seated, you get the entire person, very little idealized and with a great amount of individuality.

Léon Joseph Florentin Bonnat (to give him his full name) was born in Bayonne in 1833. As his family were living in Madrid in his youth, Bonnat first studied with Madrazo; and what he gained from that Spanish master may, in some degree, account for the dramatic note that so often appears in his portraits.

His next master was Léon Coignet (coin'-yay) in Paris. In 1857, Bonnat sent three portraits to the Salon, and then went to Italy, where he lived for several years. In 1859, he sent to the Salon his "Good Samaritan," which met with some success. More came to him in 1861, with "Adam and Eve Discovering the Body of Abel." These first pictures were, however, heavy. His individuality began to show itself in 1866 with his "Pilgrims in Rome" and his "Neapolitan Peasants in the Farnese Palace." In 1870, he traveled in the Orient and acquired another style; but this little excursion into Orientalism was short, and he soon found that his true vocation was portraiture.

His list of portraits is enormous. He has also succeeded in landscape, particularly that of the Basque country. His sense for color and dramatic style results in a fine composition that instantly interests the spectator, be he critic o

Bonnat's talents have brou[illegible] y honor that a painter can have, even the Grand Cross of the Legion d'Honneur, which was given to him in 1900.

Bonnat has been for years a great collector of artistic objects. He has given away many gifts. In his native town, Bayonne, he established a fine museum, and stocked it with a collection of splendid pictures and beautiful things of many kinds.

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IN THE LUXEMBOURG MUSEUM, PARIS THE GLEANER, BY JULES-ADOLPH BRETON

ONE day I made a little gleaner pose for me, standing on a flowery bank beside a field of wheat. Her face was in shadow, while the sunlight fell on her cap and her shoulders. As I painted her, I felt a secret joy. I cannot express the feeling of rapture that was excited by the harmony of this dark face, strongly defined against the golden grain among which ran lilac and violet reflections from the blue sky. The warm earth, the flowers—all enchanted me.

"I had already sent my 'Gipsies' to the exhibition at Brussels when one day my brother Louis seeing this little 'Gleaner' in a corner of my studio said: 'Why don't you send this to the Exhibition?' 'That,' I answered, 'is not worth it.' Moreover, I had no frame.

"My brother, however, insisted that I should do this, and discovered in the barn an old tarnished frame. It was very nearly the limit of the time allowed for sending in pictures. So I hurried it off.

"What was my amazement, when I arrived in Brussels a few days after this, to find my 'Gipsies' badly hung, and my 'Gleaner' on the line in the center of a panel, where it was attracting great attention."

Such is Jules Breton's account of the famous picture known as "La Glaneuse" (The Gleaner). The story is pretty, and proves that an artist is not always the best judge of his own work. Jules Breton belonged to that wonderful group of Barbizon painters of whom Millet and Rousseau were the leaders. He felt the beauty and the poetry of Nature as intensely as Corot, although he had not the greater master's delicacy of touch and exquisite gift of poetic expression. He felt also the character of the peasant and the dignity and strength that comes from Mother Earth as did Millet, although he did not quite reach Millet's dramatic force. As a famous French critic has put it:

"Jules Breton was in truth a very great painter; if he had had a little more sentiment he would have been a very great master."

Jules Breton was born in Courrieres, Pas de Calais, May 1, 1827. His family was in comfortable circumstances and universally esteemed. His mother died when he was young, leaving three sons. Jules was the eldest.

His childhood was happy. When asked at the age of six years what he wanted to be he replied "A painter." His first master was Felix de Vigne, whose daughter he married in 1858. Next he worked under Dolling and at the School of the Beaux-Arts. He first tried genre (zhonr—small pictures that tell a story of simple life), and he kept something of this story telling quality all his life. He first attracted attention with Le Retour des Moissonners (le ra-tur' day mwahs-so-nyere'), the Return of the Harvesters, exhibited in 1853. He gained a medal at the Exposition of 1855, and a medal of the second class, given by the Salon in 1857, in recognition of the "Benediction des Bles" (ba-na-dic'-shun day blay), "Blessing the Wheatfields," put the seal upon his reputation once for all.

In 1859, he gave an exhibition of his works, and in the same year the Salon awarded him a medal of the first class. Medals and decorations followed in the succeeding years as he brought out his fine pictures: "La Fin de la Journee" (the End of the Day), "Le Gardeuse de dindons" (the Turkey Keeper), "Les Lys Sauvages" (Wild Lilies), "Les Glaneuses" (the Gleaners), and many others. Large sums were given for his works. "Evening at Finistere" brought at the Seney sale in New York 91,000 francs ($18,500), and "The First Communion" 225,000 francs ($45,500), at the Morgan sale in 1886.

"He was both a realist and a poet," a French writer aptly remarks. "His realism stopped with his choice of subject. His interpretation always carried a certain idealism. It cannot be said that he idealized Nature, but he always revealed her happy aspects." He painted robust, healthy peasants in lovely landscapes. The wheatfields always appealed to him, but he could turn to the forest and give a noble rendering of majestic trees in summer's glory or winter's majesty.

Jules Breton wrote a delightful autobiography, which gives his opinions on art, and, as he says, "offers portraits of the painters who were my friends, and the history of the movement of art since 1848, of which I have been a part."

Jules Breton died in Paris in 1906.

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LUXEMBOURG GALLERY

"The Poor Fisherman"—Puvis de Chavannes

THREE

A DISMAL landscape near Honfleur—an immense stretch of water under a dull sky—gave Puvis de Chavannes the idea of his "Poor Fisherman," exhibited in the Salon in 1881. The painter, who was very sensitive, was "roasted." The memory of this experience remained so vividly with him that he was almost sorry at a later period when the Luxembourg bought the picture. Huysmans wrote a singular criticism: "It is a twilight picture," he said, "an old fresco, faded by the light of the moon and washed away by the rain. It is painted in lilac that is nearly white, green mixed with milk and pale gray. It is dry, hard, and of an affected stiffness. In spite of the disgust with which the picture fills me when I see it, I cannot help feeling a certain attraction when I am away from it."

Paul Mantz wrote more sympathetically. He said: "It is a Good Friday picture. All the artist's colormen have closed their shops; there is no more blue in the sky, no more green in the fields; the Lent fast has become cruel. The river's bank is lifeless earth, with here and there a few yellow flowers. A very thin girl is gathering a bunch of them, though they have no scent. The sky is pale, the water colorless, and the horizon against which the fisherman stands sharply and sorrowfully outlined seems to fit in exactly with his melancholy thoughts. And mark how complicated and how contradictory are the things of art—this picture, which hardly exists, is singularly expressive, there is a sorrowful note in the mist, an emotion in the void. Amid the desolation of the surrounding landscape, the fisherman is a striking figure of nakedness, surrender and irremediable wretchedness."

Puvis de Chavannes did not always occupy the enormous place that he holds today. His father intended him to follow his own profession—engineering. However, a severe illness sent him to Italy to recuperate, and there he made up his mind to become a painter. Returning to Paris, he worked in the studios of Delacroix (del-lah-krwah) and Conture, neither of whom cared for his work. He, therefore, withdrew into his own shell to work out his theories alone. He gave himself up entirely to mural and decorative painting. Critics saw little in the first examples that he exhibited. In fact, he was called a Lenten painter—because of the neutral tints—the grays and pale blues—the rigid lines, and the calm immobility of his figures.

"The adverse criticism that assailed Puvis de Chavannes at the beginning of his career," writes a critic, "was due largely to the fact that he was above all a decorator, and his work was unfairly judged when seen in contrast with exhibited works of a radically different nature. Seen in its proper surroundings, as the artist meant it to be seen—in Paris, Lille, Amiens, Lyons and Boston—his work has risen triumphantly above criticism. Puvis de Chavannes was inspired always by the consciousness that the true purpose of mural painting was not to disguise but to emphasize the essential flatness of the wall, and, above all, that the painting should harmonize with the usually gray tones of its surroundings. He worked, accordingly, in pale keys of cool, fresh color, the delicate tones and the subtle balancing of lines and spaces all making for repose. His subjects, although allegorical, are never didactic, and he worked with entire disregard for conventional things. Though Greek in his feeling for simple nature and his sense of vital beauty, and though influenced, no doubt, by Giotto (jot'-to), Fra Angelico and the Primitives, he is independent of all tradition—essentially modern and original. Puvis de Chavannes, indeed, may be said to have created modern decorative painting."

When once his reputation came—about 1867—the rest of his life was phenomenally successful. Perhaps his fame will rest upon the inspired decorations in the Pantheon in Paris, depicting the childhood of St. Genevieve. For this he was made an officer of the Legion d'Honneur. "The Muses Welcoming the Genius of Enlightenment" at the head of the staircase in the Boston Public Library, was painted twenty years after the Pantheon decoration. Puvis de Chavannes always painted his wall decorations on canvas. His easel pictures were rare. "The Poor Fisherman" is one of these.

Puvis de Chavannes was born in Lyons, December 14, 1824, and died in Paris, October 24, 1898.

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L. Lhermitte
1882

LUXEMBOURG GALLERY

"Paying the Harvesters"—Léon Lhermitte

FOUR

THIS large painting (6½x9 feet) is one of the most popular of late nineteenth century pictures. It has been reproduced over and over again until it is practically known to all the world. It not only tells its story well, but the chief figure is a type into which the painter has put the dignity of labor and the force of the rural character. Lhermitte is often compared with Millet, and, indeed, a superficial observer might confuse some of the works of these two artists who love to depict the sturdy peasants of France at work in the beautiful grain-fields of that country. A closer examination shows many differences between Lhermitte and the Barbizon master, not the least being that Lhermitte depicts the laborer as happy and healthful, though strong, rugged and hard-working, while Millet shows him in a darker mood, hopeless and sad. Millet confessed that he always saw things "from the shadow."

Léon Lhermitte was born in the village of Mont St. Pere, close to the vine-clad slopes of Champagne, July 31, 1844. He passed his childhood and youth among peasants, led their life, took part in their toil, and understood their joys and sorrows. This explains why he has depicted so truthfully and so sympathetically gleaners in the fields, laborers receiving their wages, women busy over their household duties in simple cottages, and, in fact, all types and scenes connected with rural life.

While attending his father's school his drawings attracted the attention of a gentleman who lived in Mont St. Pere, and who sent him to Paris to study art. He entered the studio of Locoq de Boisbaudran, also the master of Legros, Fantin and Cazin.

Lhermitte sprang into notice in 1872, when he exhibited at the Paris Salon "Le Lutrin" (The Belfry) and "Le Lavage des Moutons" (Washing the Sheep). Every year since then he has exhibited one or more pictures. These have not been restricted, by any means, to rural subjects. His brush has shown groups of vendors in the Paris markets, fashionable assemblages, interiors of churches, and the crowded lecture-room of the Sorbonne. Of course, he never neglected his beloved vineyards and wheat fields. "Paying the Harvesters" established his reputation. Everybody liked the picture. It pleased the critics and the public alike.

Lhermitte always paints in a "big style," and is a sane and healthy artist whom everybody can understand. Perhaps his love for humanity is one secret hold on the public. Many of his landscapes in the country of his birth are very lovely in tone and feeling; and as this is in the district of the Marne, and in Champagne Valley, they are likely to increase to fabulous value, for they so truthfully show this lovely country before the war laid it waste.

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THIS painting, "Lever de Lune (lev'-vay de leun) was exhibited in the Paris Salon of 1884. It is very characteristic of Harpignes (har-peen'-yeh). Here we have the river with its banks seen under a clear sky, without mist or quivering air (as Corot would have seen the same piece of Nature), and fine trees painted with loving touch. His picture shows Harpignes's pointed long horizontal lines and somewhat austere composition. This work is small (two feet and a half by three feet), but it is considered one of the best that he ever produced.

Anatole France (an'-a-tohl frahnce), the great writer, called Harpignes the "Michael Angelo of Trees." "With trees," writes a noted critic, Harpignes has a peculiar sympathy. They form the larger part of most of his compositions, and are uniformly treated by him with a respect and knowledge that is, perhaps, without a parallel in the arts. Pines and sycamores, aspens and birches, forest monarchs and humble saplings are painted in every possible aspect: in sunlight and shadow, in the cool air of the morning, in the blaze of midday, or at nightfall. At one time they will be seen in summer heavy with sunlit foliage; at another the branches will be bare, and their nervous tracery will be drawn with perfect sureness, every twig having its proper quality of wayward woody growth. Many artists have made fine studies of trees, several have interpreted individual qualities nobly; not one, however, has painted pictures of them with quite so much completeness and sincerity."

Harpignes's love for trees is shown by the little story that went the rounds of the papers in 1913, when a withered chestnut tree opposite his house was ordered to be removed. Harpignes wrote to the Municipal Council of Paris, pleading that the tree be spared, and offered to give the city two of his best pictures if the tree was saved. The Council granted his wish.

Harpignes belongs more to the Barbizon group of painters than to any other school. In some respects he is a follower of Corot and Daubigny, but he has less grace and atmosphere than Corot, and less depth and color than Daubigny. Harpignes waited long for recognition of the kind for which every painter dreams. He did not exhibit until he was thirty-four. In 1866 when he was nearly fifty, he received a third-class medal for his "Evening on the Roman Campagna" (now in the Luxembourg). In 1883, he was made an officer of the Legion d'Honneur.

Harpignes was born in Valenciennes, July 28, 1819, and studied under Achard, a little known painter. Then he went to Rome. He made his first appearance in the Salon of 1853 with a picture of the Isle of Capri (Gulf of Naples) and a morning scene near his native Valenciennes. These two pictures showed his individual taste: all his life he painted, generally speaking, landscapes of Italy and landscapes of France with trees and streams. Many were the pictures he painted on the banks of the Loire and the Allier seen in the bright glare of sunlight or under the tender light of the moon.

After the death of Corot in 1875 and Daubigny in 1878, Harpignes was one of the painters left to carry on the old tradition of classic landscape against the new Impressionism.

From 1881 onward he received a succession of honors and medals. His pictures were hung in the Luxembourg and brought fabulous prices from dealers and at auction sales. His water-colors were also highly valued.

Harpignes died in the late summer of 1916 at the age of ninety-seven. Because of his age and his wonderful work, the veteran painter was called "the Old Oak." He had a magnificent house in Paris, in the Faubourg Saint-Honoré, where he delighted in giving entertainments. His musical evenings were famous. In these entertainments he often took part himself, for he was a violoncellist of marked ability.

Bonnat in his funeral oration at St. Prive, where Harpignes died, remarked: "The Old Oak, as we called him familiarly, has fallen."

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IN THE LUXEMBOURG MUSEUM, PARIS

CAIN, BY FERNAND ÇORMON

IN 1880 Cormon exhibited at the Paris Salon his huge picture, "Cain," which attracted so much attention that it won for the painter the Cross of the Legion d'Honneur. It was inspired by a celebrated poem in Victor Hugo's "Legend of the Centuries," and depicts Cain's flight from Jehovah at the head of his large family. Cain is not an attractive looking person, and his progeny are not handsome either, and they make no appeal for sympathy as they straggle off over the sands of the desert. Perhaps the impression that the painter wanted to produce was one of dislike for Cain and his tribe. But this is a strong work and a daring one on a daring subject.

The canvas measures twelve feet by twenty-three!

At a later period he returned to this kind of subject by painting "The Funeral of a Chief in the Iron Age" (1892), and a series of wall paintings for the French Museum of Natural History treating of pre-historic periods of the human race.

Fernand Cormon was born in Paris, December 22, 1845. At an early age he showed his talent for drawing. His first master was Portaels in Brussels; and later he studied under Cabane and Fromentin in Paris.

From the very beginning of his career Cormon has had nothing but success. He has painted many kinds of pictures. He has tried his hand on portraits, flowers, dogs, Biblical subjects, oriental subjects and pictures that tell stories. He has succeeded in everything. His works exhibited at the French Salon and in various expositions have always won for him medals and decorations.

He is now professor in the Ecole des Beaux-Arts and a member of the Institute. His first work to attract attention was "Le Mort de Mahomet" (The Death of Mahomet) exhibited at the Salon in 1868. Then came "Les Noces des Nibelungen"—(Nibelungen marriages)—in 1870; then "Sila," an Oriental picture, in 1873; then "The Death of Ravana" in 1875; and "Cain" in 1880. He visited Tunis, and, returning to Paris, set to work again on legendary and historical subjects.

Of late years he has given much attention to portraiture. Among his successes in this line is a portrait of President Loubet (loo'-bay). Since 1898, Cormon has been a member of the Institute.

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THE MENTOR · DEPARTMENT OF FINE ARTS
FEBRUARY 15, 1918

The Luxembourg Gallery

By WILLIAM A. COFFIN, N. A.*

PALACE OF THE LUXEMBOURG—East Façade (old museum)

MENTOR GRAVURES

THE GLEANER, BY JULES ADOLPH BRETON · CARDINAL LAVIGERIE, BY LÉON BONNAT
CAIN, BY FERNAND CORMON · MOONRISE, BY HENRI HARPIGNIES
THE POOR FISHERMAN, BY PIERRE PUVIS DE CHAVANNES
PAYING THE HARVESTERS, BY LÉON LHERMITTE

THE beautiful building in Paris known as The Palace of the Luxembourg was erected in 1615-20 for Marie de Médicis (méd-dee-chee), widow of Henri IV, by Jacques Desbrosse (day-bross), one of the ablest French architects of his time. It stands on the site of the old Hotel du Luxembourg, a private mansion, from which it takes its name, and presents its principal façade, about three hundred feet in length, toward the Rue Vaugirard, opposite the Rue de Tournon, which, as a much wider continuation of the Rue de Seine, leads up the slope of the "Left Bank" from the river. The corresponding façade faces the garden of the Luxembourg, with its terraces, formal groups and belts of trees, its avenues and fountains, the whole constituting one of the loveliest spots in all Paris. Certain restorations and changes have been made necessary in the building, notably by Chalgrin, under Napoleon I, and by A. de Gisors, under Louis Philippe, but the style of the original has been adhered to and its character preserved.

*The title N. A. means full membership in the National Academy of Design.

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THE LUXEMBOURG GALLERY OF SCULPTURE

After being occupied as a royal residence until the Revolution, the palace was made a state prison by the convention; then the Directoire and the Consulate held their sittings in it, and under the First Empire it became the home of the Senate. Known as the Chamber of Peers under Louis XVIII, it was occupied as the *Palais du Senat* until 1870, when it was used for the offices of the Prefect of the Seine, after the Commune had destroyed the Hotel de Ville (veel). In 1879, when the national chambers returned definitely from Versailles (vare-sei) to Paris, the Luxembourg Palace again became the home of the Senate, and it is so occupied for its sittings and administrative functions at the present day.

Origin of the Luxembourg Museum

The eminent art critic, Paul de Saint-Victor, in the *Paris Guide*, published when the Universal Exposition of 1867 was held in Paris, opened an eloquent chapter on the Gallery of the Luxembourg with the following words: "The Museum of the Luxembourg has an illustrious origin. Before it became the 'Waiting Room,' so to speak, for the Louvre Museum, it was the Louvre's cradle. In 1747, the masterpieces of all schools acquired by the kings of France were scattered through the galleries and apartments of the royal palace. These priceless pictures, immortal examples of art, hearthstones of its traditions, served no better purpose than to ornament halls of ceremony or to give a moment's distraction to courtiers pacing antechambers." The Luxembourg, as a matter of fact, was the first French art museum, and was the parent of the Louvre (loovr). Its origin goes back to 1750. It might be said that it dates from 1623, when Rubens had just finished the twenty-four magnificent compositions in the Luxembourg Palace Hall of State, splendid works, which inspired many French artists of succeeding generations, but we

THE TWO SORROWS. By Theodore Rivière

may best adhere to the later date, the 14th of October, 1750, the day when the Gallery of the Luxembourg was, for the first time, opened to the public.

The opening was an important event in the history of art—important by its immediate effects and by what followed. On that day ninety-six masterworks, gathered together by the kings in various reigns, were placed before the public, a splendid collection, offered for study to artists and amateurs of art. Many of the great examples of the masters that now adorn the *Salon Carré* (kar-ray) and the grand gallery of the Louvre were there; the Titians (tish-ans), the Raphaels, the Veroneses (vare-o-naze'-ees), the Rembrandts, the Claude Lorrains and the Poussins. At the same time the Rubens gallery was open to visitors. In 1779 the Luxembourg Palace became the possession of Monsieur, brother of the King, and as the art collection was the King's property, it could not be left in a building that became, in a sense, private property. So the pictures, including the Rubens series, were moved to the Louvre. This was, indeed, in accord with a project for a state museum of art first advocated years before by La Font de Saint Yenne, an associate-member of the Academy of Lyons, whose name in this connection was quite lost sight of until the researches of contemporary authorities recently restored it to its proper place. Then there is a gap in the story of the Luxembourg during which the Directoire and, later, the Senate, occupied it. In 1802, the Rubens series having been brought back by the director, Naigeon, and other works added from Versailles, together with important pieces by masters of the Italian, Flemish, Dutch and other schools, it became again a museum of about one hundred pictures. A decree of Louis XVIII, later on, decided that the museum should be devoted to works of *living* artists, and its inauguration as such took place in April, 1818. The Republic of 1848 had a great influence on the fine arts; artists, indeed, took a very active part in it. Charles Blanc, brother of the statesman Louis Blanc, became Minister of Fine Arts, Millet (mee-lay), Courbet (koor-bay) and other innovators were coming to the fore. Under Jeanron (zhon-rohn), in the two years from 1848 to 1850, the Luxembourg took on, in a general way, the form and scope that

FLORENTINE SINGER
By Paul Dubois (doo-bwah)

REFLECTION. By Gustav Michel (mee-shell)

distinguish it today. In the administration of Phillipe de Chennivieres (shen-niv′-yare), under the Second Empire, not only sculpture but also drawings and engravings received their proper place in the collection; the works of Meissonier (may-sone-yay), Fromentin (froh-mong-tang), Daubigny (daw-been-yeh), Henner, Delaunay and other artists of the day came in to join the masterpieces of Monsieur Ingres (ahngr), of Delacroix (del-lah-krwah), and other leaders of the Classic and of the Romantic schools. With the Senate occupying the palace proper and its need for increased space for its functions and activities, the Luxembourg Gallery has suffered for room. It has been crowded, and it has been possible, only by surmounting many difficulties, to place the works to advantage, especially the sculpture. Now, after prolonged efforts on the part of the government authorities to find in Paris a suitable place, the Museum will at some time after the war be fittingly housed in galleries sufficient not only for its present composition, but its future growth, for, by a government decree of November 18, 1909, the buildings of the venerable seminary of Saint-Sulpice (sahng-soolpeece) were allotted for the purpose, and there, it may be confidently predicted, the museum will in the future add to its history as many brilliant pages as have marked its course in the past.

THE HOUSEWIFE. By Joseph Bail

Luxembourg, Waiting Room of the Louvre

A distinguishing characteristic of the Luxembourg is that it is a "waiting room," as Paul de Saint-Victor called it, for the Louvre. After being in the Luxembourg for ten years, a work may be removed to a permanent place in the Louvre. Many works have thus been taken away to receive the higher honor, so that today we find the Millets, the Corots, the Troyons, the Rousseaus, in the Louvre. Other works as fine have not been removed, such as "Fortune and Child," by Paul Baudry, who died in 1886. The selection of works is arbitrary, and it does not follow that an especially good work of a master must go to the Louvre ten years after his death. Other works are often obtained for the Louvre from various sources, as by bequest or by purchase by the state. Quite a number of works, too, are sent to the provincial museums of art, in the great towns, such as Bordeaux, Lyons and Marseilles, or to Rouen,

Orleans, Lille, Montpellier, and other places. Art in France profits greatly by the centralized control of the government in the Ministry of Fine Arts and Public Instruction.

THE HAYMAKERS. By Jules Bastien-Lepage

The Palace and the Gallery

The Museum of the Luxembourg, or the Luxembourg Gallery, a state collection of works by living artists, occupies a building to the west of the palace, adjoining another building known as the "Petit (pet-tee) Luxembourg," which, having been built for Marie de Médicis, is now the residence of the president of the Senate. In the palace itself, distinct from the collection in the galleries, are numerous works of note by French artists. In the Salle des Pas-Pedrus (pah-ped-roo) are ceilings and wall decorations by Alaux, "The Apotheosis of Napoleon I"; "Peace and War," by Brune, and the "Apotheosis of the Kings of France," by Lehmann. In other apartments and salons are similar works by the pupils of Rubens and by Van Thulden, Van Huden and Hoeck. Others, again, are by French artists, such as Gigoux (zhee-goo) and Abel de Pujol.

As pictures and pieces of sculpture are removed from time to time and new acquisitions are added to the collection, the aspect of the galleries changes in the hanging and placing. But it is never very difficult to find the most celebrated works, and in looking for them the visitor is often agreeably surprised by finding new ones that stimulate his interest. The catalogue is arranged alphabetically and the numbers are easily found, for the Luxembourg, though a large collection, is not a vast museum like the Louvre. The collection of modern art, including the works of some noted artists besides those of the French school, is the most comprehensive and important one in Europe. If it has a rival in completeness it will be found in the Metropolitan Museum of Art, in New York, where, in addition to numerous galleries in which are displayed examples of all the con-

THE DISCIPLES. By Eugène Burnand

temporary European schools in the permanent collection, there are also many examples of the first importance in the loaned collections of works by French and other artists of today. And this fine ensemble is supplemented by a representative and constantly added-to collection of works by American artists.

THE DREAM. By Edouard Jean Baptiste Detaille (de-tei)

French Sculpture

Sculpture and architecture in France are arts indigenous to the soil. In the Middle Ages, when her architects built the great cathedrals, native craftsmen adorned them with sculpture. The development of the art of sculpture has proceeded uninterruptedly from these men, and it has been less influenced by the antique than the sculpture of Italy. Jean de Boulogne, one of the earliest of French sculptors, it is true, left much of his work in Italy, but Jean Goujon (goo-zhong), Jean Cousin (koo-zang), Germain Pilon (peel-ong) and others worked at home.

In the seventeenth century, Puget (poo-zhay), the Coustou brothers and their contemporaries decorated palaces, and châteaux, as their predecessors had done, and the practice of making separate statues, not intended for any particular architectural setting, soon followed. In the eighteenth century Houdon achieved great fame, and Rude forms a connecting link with the sculptors of the nineteenth century, made illustrious by Paul Dubois, Carpeaux, Barye, Falquière, Mercié, Dalou, Fremiét (frem-ee-ay), and a host of others. Such artists as Bartholomé (bar-tol-o-may), and Gardet (gar-day) today maintain the great traditions of the French school; and Rodin (roe-dan) has gained world wide renown by the originality of his conceptions, but it is much to be doubted whether his influence will be permanent, for his sculpture constitutes a peril for those who seek to follow it.

PORTRAIT OF A WOMAN
By Claude F. Gaillard (gei-yard)

French Painting

The art of painting did not grow up, so to speak, from French soil, but was "imported" from Italy. True, in the cathedral building period the missal painters and the *écrivains* (ay-kree-vang—meaning *scribes*) worked constantly in the convents, and the greatest artists in stained glass of

any time filled the innumerable windows of the churches with glorious color harmonies. The art of painting, however, really dates from the period of Francis I, when that monarch brought Leonardo da Vinci (dah vin'-chee) and Andrea del Sarto to his court at Fontainebleau. Francis united the native schools of "French Primitives" of Tours (toor) and of Paris at his court, and in due time, especially through the teachings of the Italians, Primaticcio (pree-mah-teetch-ee-yo) and Rosso, there arose a group of capable French painters.

ISHMAEL
By Jean Charles Cazin

The Clouets (kloo-ay), father and son, and Jean Cousin are notable in this epoch. In 1648 the French Academy of Painting was founded, and later it was broadened in scope by Louis XIV's great minister, Colbert. Since that time French painting has held the foremost place among all the European schools. Developing through Philippe de Champagne and Vouet (voo-ay), Le Sueur, Poussin (poo-sang), and Claude Lorrain, it blossomed with great beauty at the hands of Watteau, Boucher (boo-shay), the portrait painters of the eighteenth century, and Greuze and Chardin. In Fragonard (1732-1806) we have a connective link between these men and David (dah-veed) and Prudhon, the *chefs d'école* (shef-day-kole—meaning leaders of their school) in the earlier years of the nineteenth century. From this point onward the names of the great men are familiar. From Monsieur Ingres (1780-1860) and from Flandrin proceed such masters of the academical school as Baudry. From the Romanticists, Delacroix and Gericault (gare-ee-koe), descend "the Barbizon men," the Orientalists, such as Regnault, Fromentin and Decamps; and the Realists: Courbet, Manet (mah-nay) and Bastien-Lepage. Claude Monet, also, may be classified as indirectly descended in the same line. Then, it should be noted, that Charlet (sharlay), Baron Gros (grow) and Horace Vernet (ver-nay) were the fathers of military painting, whose brilliant

THE ARGENTEUIL REGATTA. By Claude Oscar Monet

VENICE. By Félix François Georges Philibert Ziem

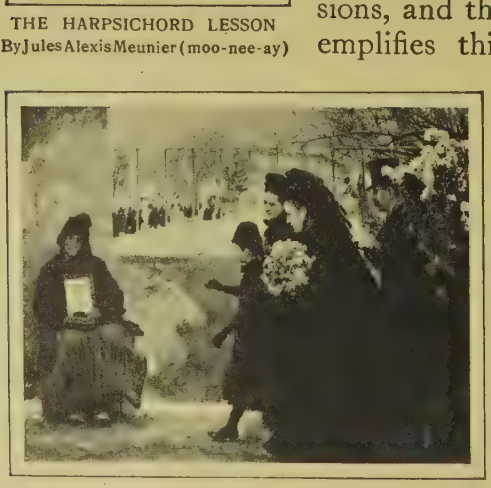
successors, Detaille and De Neuville, will inevitably be followed by others when days of peace have returned after the close of the great war.

Bonnat and Breton

In our own day the official head of the French school, Léon Bonnat (bon′-nah), member of the Institute, Grand Croix (krwah—meaning "cross") of the Legion of Honor, director of the École Nationale des Beaux Arts, president, or honorary president, of great art bodies that form the strength of the French school of painting and maintain its splendid traditions, is a venerable master, well past the age of eighty. He painted the great portrait of Thiers, first president of the present republic, other presidents in turn, and has painted many notables, such as Victor Hugo, Pasteur, and Puvis de Chavannes. He has had, also, numerous Americans as sitters. He is the author of various figure compositions that exhibit his qualities of virile drawing, profound knowledge of form and relief, and compelling but restrained schemes of color. In the Luxembourg the portrait of Cardinal Lavigerie admirably presents the characteristics of his art. The famous head of the "White Father" was a great civilizing as well as benevolent force in the French African possessions, and the imposing aspect of the portrait exemplifies this authority and kindliness. "The Gleaner," by Jules Breton, is one of the celebrated canvases of the painter-poet who, like Millet and Courbet, followed the path of rural and popular subjects in his own way. "Blessing the Wheat," "The Breton Pardon" (a religious ceremony and procession), and "Women Harvesting Potatoes" are others of his famous compositions. "The Gleaner," a wholesome, vigorous young peasant, typifies the sturdy womanhood of the agricultural population of France.

CARMENCITA
By John S. Sargent

THE HARPSICHORD LESSON
By Jules Alexis Meunier (moo-nee-ay)



ALL SAINTS' DAY. By Emile Friant

PORTRAIT OF MADAME X
By G. Boldini (bol-dee-nee)

LADY WITH THE GLOVE
By Emile Auguste Carolus Duran

Cormon, Harpignies and Lhermitte

The subject of the picture "Cain," by Fernand Cormon, a very large canvas, some twelve feet high and twenty-two feet long, is found in Victor Hugo's "*La Légende de Siècles*" (see-akel), (The Legend of the Ages), and depicts Cain, in his old age, fleeing with his family from before Jehovah. Leading the way across the desert, he is followed by strong men bearing the mother on a litter, his sons and retainers surrounding the cortège. The figures are larger than life, and the color scheme, cast in grays and browns with qualified pink, gives a sober, if not gloomy, aspect to the work. Notable is the sense of movement, which is forcibly portrayed; the caravan moves surely and rapidly as it trudges along. A fine example of the landscape painting of Henri Harpignies (on-ree ahr-peen-yeh) who, born in 1819, died in 1917 at the great age of ninety-eight, is found in "Moonrise," which, together with a collection of his water colors, represents him in the Luxembourg. The composition is pleasing; the general effect is dignified and serene. Hale and hearty to the last, Harpignies painted largely from nature and in many parts of France. In "Paying the Harvesters," by Léon Lhermitte, we find an episode of peasant life ably depicted by an artist who has won a high reputation in this province of art. Lhermitte's works deal mainly with the pictures of life in the fields. His pictures are extremely popular in the United States, and many of them are in the possession of private citizens. The farmer, on the right, in blue and wearing leather gaiters, is seen paying one of his men from a sack of coins, while another awaits his turn. Back of the woman seated with her baby in her lap, another harvester

EXCOMMUNICATION OF ROBERT THE PIOUS
By Jean Paul Laurens

counts over the wages he has just received. At the left, a fine seated figure of a laborer with his great scythe, tired from his toil, forms a most impressive feature of the composition.

MADONNA OF THE CONSOLATION
By William Bouguereau

Puvis De Chavannes

The Metropolitan Museum of Art is fortunate in possessing, in "The Beheading of Saint John the Baptist," one of the representative easel pictures by Puvis de Chavannes, of which there are not many. In the Luxembourg are two: "Hope" and "The Poor Fisherman." This latter picture was much discussed and bitterly criticised in some quarters, when it was exhibited at the Salon, which was also the case when his first great mural paintings were shown. It was not long, however, until the painter was recognized as a great artist by all groups and parties. Now his fame is secure, and his work is one of the glories of French art. The greater part of the life of Puvis de Chavannes was spent on the wonderful mural decorations which are in the museum of Amiens; the Pantheon, and the Sorbonne, in Paris; in the museums of Marseilles, Lyons, and Rouen; the City Halls of Paris and Poitiers (pwah-tee-ay); in the mansion of his friend Léon Bonnat, and in the Public Library at Boston. The Luxembourg Gallery also possesses an incomparable series of the artist's drawings. "The Poor Fisherman" is austere in general design. It shows simplicity in drawing that is based on thorough knowledge of form, and in color it is of a sobriety that accords with simplicity and severity. Its subtle message is felt on acquaintance rather than at first sight.

CONSECRATED BREAD
By Pascal Adolphe Jean Dagnan-Bouveret

There are in the Luxembourg many fine pictures and pieces of sculpture by the most celebrated artists in France. There are examples, also, of the best work of famous men of other schools. Notable among those by Americans are "Carmencita," by Sargent, painted in New York when the Spanish dancer was touring the United States, and "Portrait of the Artist's Mother," by Whistler. The purchases for this museum

are made by a government commission of high authority, and it is justly considered a crowning honor to be represented on its walls.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Arago, the genial and enthusiastic old director of the Luxembourg from 1879 to 1892, called his beloved gallery the "Purgatory," as it was, in reality, a passageway leading to other galleries. This fact caused the leaders of the institution many a heartache, for it was not easy to give up the works of such artists as Ingres, Delacroix and their colleagues. There was nothing to do but to fill the gaps with new acquisitions—and go on undismayed. Arago, when compelled to relinquish masterpieces to the Louvre, took advantage of his connection with prominent political leaders and men of affairs to ransack the palaces and ministries to cover the losses.

LOVE AND LIFE
By
George Frederick Watts

PEASANT GIRLS OF CERVARA
By Ernest Hebert

The greatest event in Arago's career was the installation of the new museum. At the present day the Luxembourg enjoys the benefaction of the administration of Fine Arts of the Council of Museums. These contributions enable it to fill up the gaps, and to collect works of foreign artists. France has always generously opened the doors of its museums to the stranger, and the Luxembourg is distinguished for varied and extensive representation of foreign artists. At the present day there are six halls devoted to foreign art.

The Luxembourg has a mission of instruction. Its duty is to inform the public of all contemporary movements and manifestations of art throughout a determined period, taking up the history of art where it was abandoned by the Louvre in order to continue and explain it to generations of the present day.

SUPPLEMENTARY READING

THE MASTERPIECES OF THE LUXEMBOURG MUSEUM. A luxurious volume containing 50 large reproductions in full colors and 45 half-tone reproductions. Introduction and biographical matter by Léonce Benedite.

WHAT PICTURES TO SEE IN EUROPE. With Illustrations. By Lorinda M. Bryant. Containing an interesting chapter on The Luxembourg Museum.

*** Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

Let us go together through the gallery. Do you like that picture opposite us? Then let us take time to get the full value of it. Look at the serene repose of that gentle woman. That is Whistler's portrait of his mother. Can we do better than just to stay here for awhile and cultivate the acquaintance of that lovely old lady? Whistler has put much more than paint on that canvas. He has put filial love and devotion there. Every touch is tender. The artist has pictured not only *his* mother, but the very Spirit of Motherhood.

★ ★ ★

Your eyes are wandering to that landscape over there. That is good art, too — but hold fast here. You have only begun to get the message of this portrait. But there you go—catalog in hand. You have checked off Whistler's Mother, and now the landscape must have a glance. You are "doing" the Luxembourg Gallery, and you have only until twelve o'clock to "do" it in. This afternoon you must "do" the Louvre. If time is your only consideration, why not wear roller skates and do both galleries in three hours? Then you can tell your friends at home how much you have "done" in one morning, and your trip will be a full one.

PORTRAIT OF THE ARTIST'S MOTHER
By James MacNeill Whistler

★ ★ ★

But what has time to do with art? Is our enjoyment of a Chopin sonata to be measured by the speed with which it is played? Is our appreciation of Corot's landscapes to be determined by the number of them we can see in one morning? It is the habit of too many to turn an art visit into a nerve-wearing undertaking. The visitor ends the day in the gallery with an attack of art dyspepsia—like a greedy child who tastes eagerly and hastily of every dish on a table where a bounteous feast of rich food is laid.

Our feelings in the presence of art should be calm and restful—our nerves tuned to the key of sympathetic appreciation. How often are they so? Look at that tired pair over there! They have been going since nine o'clock, and they have stared at so many different pictures that their minds are like kaleidoscopes—filled with oddly assorted forms and colors that shift fantastically at every turn of their heads. They are nervously flat.

★ ★ ★

And as far as any real art benefit is concerned, it would have been better for them to have stayed at home and looked thoughtfully and intelligently over a few good reproductions of fine art. Good pictures are like good people: you cannot come to know them by meeting them hurriedly in a huge crowd—merely passing before them with a quick handshake and a hasty greeting. You must seek them out and cultivate them separately if you want to know their full value as individuals and as friends.

★ ★ ★

Try this method of learning the value and meaning of art. The country has many fine pictures. The Metropolitan Museum of Art in New York offers a rich collection, so do the great galleries in Boston, Philadelphia, Buffalo, Chicago, Washington, St. Louis, and other cities. The next time you can pay any of them a visit, don't try to "do" them in a morning. Consider your visit an opportunity to form a few really valuable art friendships—and make the most of it in that way. You will find that your time has not been wasted—nor your nerves. It will be a day worth while—a day of quiet satisfaction and self-improvement.

W. D. Moffat

EDITOR

IN THE NATIONAL MUSEUM, NAPLES

JULIUS CAESAR

ONE

GAIUS JULIUS CÆSAR was born in 100 B. C. of old patrician stock. In youth he received from Greek masters the elements of their culture, including astronomy, philosophy, and rhetoric. To complete his oratorical studies he sailed for Rhodes, but on the way was taken captive by pirates and held for ransom. This mishap would have subjected him to ridicule, had he not, on his release, manned a ship and punished his captors. Returning to Rome, he entered politics, the most ambitious career open to fashionable young men. In this vocation he had to pay his respects to men of influence, plead cases at court, and render financial or other assistance to unfortunate clients; he had to call by name and compliment all whom he met, to entertain lavishly, and attend the various social functions of all classes. Above all he had to maintain a permanent coterie of supporters to act as agents in time of need.

In 68 B. C. he reached the lowest rung in the political ladder. This was the office of quæstor, who had the handling of public funds. Soon afterward as ædile, commissioner of public works and games, his magnificent entertainments won the good will of the voters, and brought about his election to the Supreme Pontificate. In this capacity he directed the state religion, and his person was esteemed sacred. It was a great political advantage. Next he was elected prætor, whose chief duty was to preside over one of the criminal courts. After a man had held the prætorship or the consulship the Senate usually appointed him as a proprætor or proconsul to the government of a province. As proprætor accordingly Cæsar governed Spain in 61-60. Returning home in the latter year, he formed a political ring, known as the First Triumvirate, with Pompey, a general who had gained splendid victories in the Orient, and Crassus, the wealthiest capitalist of the empire. This combination secured the consulship for Cæsar for the year 59. His opposition to the Senate during this year, and his legislation in the interest of the people made him very popular. As proconsul (58-50) he conquered Gaul. Meanwhile Crassus was killed in battle; and Pompey, adopting the cause of the Senate, prepared nominally to defend the Republic; in fact, to rid himself of a powerful rival. In the civil war that followed the seasoned veterans of the popular hero proved superior to the forces of the Senate, most of them hastily gathered from the farms. Thereupon the Senate, shifting about, heaped honors and triumphs upon the victor. As consul, dictator, and supreme pontiff Cæsar was virtually, though not in name, a king (49-44). The power of the aristocracy was broken, but its hatred lived and generated a plot to kill the "enemy of the Republic." On March 15, 44, Cæsar fell, stabbed with twenty-three wounds, at the hands of erstwhile friends.

Cæsar began his career as a politician, but ended it as a statesman. His courage, clemency, and personal charm won countless friends. While costly entertainments were a political necessity, his moderation in private life earned the respect of Roman society. A blue-blooded patrician, he steadfastly championed the popular cause. This policy alienated his own class, and finally resulted in his death. His political understanding developed hand in hand with his patriotism. Better than his contemporaries, he saw the economic and social decay of the Republic, and felt that inefficiency and corruption could be eradicated in no other way than by a strong monarchy. His own supremacy he brought about with the minimum of bloodshed. When once in power he vigorously swept away the weaknesses and oppression of aristocratic rule, and laid a solid foundation for the future peace and prosperity of the empire.

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THE RIVER TIBER—IN THE TIME OF CAESAR

THROUGH nearly four centuries of conquest and alliance (400-44 B. C.) the Roman empire came to embrace the entire Mediterranean region. After Cæsar's conquest of Gaul, it extended from the Atlantic to the Euphrates, from the North Sea and Alps to the Sahara. This vast area was organized into administrative divisions, called provinces. Its very size meant a heterogeneous population, scores of peoples, each with its own language and customs. In the east Greek had replaced local tongues for literary, diplomatic, and business purposes. In the west many dialects remained; for Latin, though official, was but gradually coming into universal use.

Life in the empire was mainly agricultural. Tools were simple, if not primitive; and only after a struggle could the peasant produce enough to last until the next harvest. Industries were largely domestic, carried on at home, or in small shops for local use. The eastern parts—Egypt, Asia Minor, and western Asia—were far wealthier. Here commerce and skilled industries were more flourishing, though by any modern estimate, on a small scale. As there were no machines in the modern sense, goods had to be made by hand. The imperial roads were in excellent condition but distances were long, travel was slow, and transportation expensive, save by water.

When a new territory was incorporated into the empire, it became a province. It was placed in charge of a quæstor, who controlled financial matters, and a general executive called proprætor or proconsul—both appointed annually by the imperial government. The governor commanded the army and acted as the highest judge in his territory. The province was divided into city-states, each of which retained its laws and customs, its magistrates, council, and popular assembly. They managed their local affairs, and no attempt was made to interfere in their religion. Instead of rendering military service they had to pay annual tribute. At auction the highest bidders received contracts for collecting taxes in the several cities.

Unfortunately, abuses crept into provincial rule. In the first place, Rome favored her citizens at the expense of her subjects. Native merchants were superseded by greedy speculators and traders, who, reducing the people to poverty, drove the peasants from their farms and built up vast estates of their own. The evil of "farming" taxes became intolerable, for avaricious contractors made the peasants pay far more than their due. In his year of service, too, the typical governor expected to accumulate a fortune sufficient (1) to pay political debts, (2) to bribe judges in case of prosecution, (3) to live in luxury the remainder of his life. Few governors were honest enough to check these wrongs. Furthermore, the wealthier provinces were heavily overtaxed to help pay the expense of governing the newly acquired frontier provinces, which as a rule were financial failures.

These evils Cæsar went far in remedying. He curtailed the system of "farming" taxes, and placed it under strict supervision. Thus capitalists were prevented from openly plundering the subjects. He appointed able, honest governors, and held them to account. Legionary commanders, too, appointed by him to serve under the governor, and revenue officials—his own servants and freedmen—saw that his will was everywhere enforced. The provinces, especially the poorer ones, were to be cultivated and improved. An attempt was made to equalize the burden of taxation, and the heavy drain on the eastern provinces was lessened. Lastly, in order to abolish class and national distinctions, and to weld together the empire, Cæsar allowed himself to be worshipped as a god, and adopted the policy of rapidly granting citizenship to provincials. In aiming to bring about such an empire devoid of nationality Cæsar followed the procedure of the great Alexander, and set an example for his successor, Napoleon.

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THE ROMAN FORUM—IN THE TIME OF CAESAR

EARLY in his career of conquest Alexander the Great subdued Egypt and founded Alexandria (332 B. C.) This country proved the most valuable part of his vast realm, and afterward of the Roman Empire. The valley of the Nile is exceedingly fertile, well watered as it is from the river, and continually enriched by the alluvial deposits from the yearly overflow. The people were patient and laborious. For thousands of years they had toiled like slaves for their Pharaohs, whom they looked upon as gods, and who owned all the land and most of the wealth of the kingdom. Naturally Alexander usurped the property rights and the divine rights of the Pharaohs; and ultimately when Egypt fell as a kingdom, to his general, Ptolemy, the latter succeeded to all these advantages. For nearly three centuries Egypt was ruled by the dynasty thus founded, in which each king bore the name Ptolemy, inherited from his father. The king was proprietor, not only of all the land but also of the extensive industrial plants and shipping. As Alexandria was the greatest manufacturing and commercial center of the world, Ptolemy was far the wealthiest capitalist. His military and civil officers were Greeks; his soldiers were Greeks and other foreigners; so that with his complex military and administrative machine he was able to govern the Egyptians as a conquered people. In the eyes of the kings they were mere producers of wealth; the official language was Greek, and the majority of sovereigns did not take the pains to learn the native speech.

At first remarkably competent, the Ptolemies gradually declined in ability, and even before the birth of Cæsar had come to be subservient to Rome. We may imagine with what longing the greedy Roman oligarchs viewed this kingdom, and how persistent was the agitation for its conquest.

Such an object Cæsar undoubtedly had in view when he sailed against Alexandria with the pretext of settling a dispute between Ptolemy and his sister Cleopatra. This fascinating woman convinced the Roman general of the justice of her cause, and was accordingly placed on the throne. Their mutual infatuation became the gossip of Rome when she afterward visited that city. Though not beautiful, the Egyptian queen was a charming woman. A talented linguist, she could dispense with an interpreter in dealing with her subjects and with foreign princes. Fond of music, literature, and art, she made a pleasing hostess, while her gorgeous entertainments captivated her guests. She was gifted, too, with an instinct for the various paths to men's affections; and her melodious voice and pretty ways won her desires from the strongest of rulers. This demoniac fascination, coupled with an ambition to found a great empire, made her one of the most powerful women in all history.

After Cæsar's death Octavianus (Octavius—called Cæsar Augustus) remained at Rome, while Antony governed the eastern half of the empire. Soon he fell under the spell of Cleopatra, and gladly married her that he might become, without conquest, king of Egypt. Political motives underlay this romance: he wanted to add Egypt with its vast wealth to his domain, while she, no less ambitious, viewed the chaos at Rome as an opportunity to secure for herself Antony's share of the empire. Octavianus saw the will of Antony bending before his consort's superhuman fascination. Appreciating the danger to Rome, he defeated Antony in a naval battle, 31 B. C., sailed to Egypt, and with little trouble captured Alexandria. Seeing that all was lost, the royal lovers committed suicide. Thus fell the last glorious remnant of the Alexandrian kingdom. Henceforth it was but a part of the Roman world-state.

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NOWHERE is the versatility of Julius Cæsar more clearly in evidence than in his literary accomplishments, the majority of which unfortunately have been lost. His scientific spirit is manifest in an astronomical work, "Concerning the Stars," which we do not have, but which was doubtless connected with his reform of the calendar. As an orator Cæsar was famed for his precise use of language, good taste, and vivacious, forcible style of delivery, qualities as necessary to his political career as to success in authorship. The "Dialogue on Orators," however, though highly praised by Cicero, has disappeared, likewise his treatise on Grammar. The world no longer has his collection of despatches and letters, many of them in cipher, or his political pamphlets against Cato, who had been eulogized as "the martyr of the Republic," or his "Collective Sayings," a veritable store-house of satirical witticisms, or his many poems, with the exception of a well-known criticism of Terence, the playwright.

We can only judge his varied literary talents by his "Commentaries On the Gallic War" in seven books, and "On the Civil War" in three, known to all schoolboys and college students. The former dictated amidst anxiety and distraction were intended to show his ability and courage as a general, to justify the moderation of his Gallic policy, and to forestall attacks by political opponents. Written in the third person, their modesty dispels the suspicion of egoism, yet the author knew how, without violating the truth and without boasting, to display his merits to the greatest possible advantage. The language is simple and restrained yet vigorous and clear. There are thrilling moments, for example, in the description of the ever-threatening danger of Sabinus, or the exciting escape of Cicero, when the fort of Aduatuca was endangered by a swoop of German marauders. Throughout the story the natives, with their inferior civilization, their perfidies and duplicities, are mere pigmies in the clutches of a giant. Like an irresistible force of nature, the great Roman tramples down everything in his path.

The same impassive restraint is shown in the "Civil War." The work contains fewer thrilling events; but dramatic movements like the crossing of the Rubicon, grievances at the hands of his enemies, and his frequent overtures for peace seldom fail to awaken the reader's sympathy. The word "commentaries," applied to these books, signifies merely "notes," as the author himself regarded them; but in the judgment of after ages they are model historical narratives.

From the "Commentaries," too, we may form an estimate of Cæsar the general. In knowledge of the technical departments of warfare he has had few superiors. He knew how to enroll and organize vast numbers of raw recruits, and to transform them rapidly into trained military units. The ease with which he overcame the dangers and difficulties constantly confronting him testify to his consummate tactics and strategy. He was without a peer in practical psychology—a prime factor in successful generalship. This quality enabled him to read and understand the feelings of adversaries as well as of his own men. He possessed coolness, too, and self-control to an extraordinary degree, which served to win the confidence and affection of his troops, and to discourage panic and disaster. He was, moreover, a just critic, eager to praise, slow to blame. His inherent generosity willingly recognized and rewarded merit in officers and men. Cæsar was especially fond of his centurions—the flower of those who had risen from the ranks. Often without political or family ties, they fought and died for him alone. Though of slight physique and generally in poor health, through simple living and sheer force of will Cæsar bore many arduous campaigns, often marching on foot with his men. It was this unfailing vigor and resolution, manifesting itself in acts of heroic daring, which gave courage and moral determination to his forces.

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THE DEATH OF CAESAR, BY J. L. GÉRÔME

THE most distinguished of Cæsar's contemporaries was Cicero. With an exceptional education, he entered politics, where, in spite of scant means and ignoble ancestry, he finally attained to the consulship, 63 B. C. Throughout his career, an ardent supporter of the Republic, he opposed the arbitrary rule of Cæsar; and in the Civil War he favored the Senatorial party. In the troubles following Cæsar's murder Cicero heroically defended the Republic in many a brilliant oration; and in this cause he sacrificed his life. Though possessed of many noble qualities, his vacillation, artistic temperament, and supersensitiveness unfitted him for statesmanship.

Cicero's chief claims to greatness lie in the fields of literature and philosophy. He was a poet of no mean ability. His "Orations," with their kaleidoscopic range of mood and choice of words, are the most brilliant in the Latin language. The painstaking labor required for this supreme mastery of speech is shown in his rhetorical works. His "Letters," written in simple style, lay bare a human heart, with all its shortcomings and aspirations, while through their wide range of topics they bring the reader into intimate touch with the spirit of the age. Of farther-reaching influence are his works on political science and philosophy. His "Republic" aims to discover the best form of government, and to examine into the foundations of national prosperity. His many philosophic writings set forth the various Greek schools of thought, especially the Platonic and the Stoic. Through the medium of a diction so perfect as to make Latin the universal language of culture for centuries to come, Cicero successfully transplanted Greek thought to Latin soil. Nor did his influence cease there; from his philosophy the Church fathers drew inspiration; and in it centuries later the scholars of the Renaissance first found the vitalizing spark of Greek culture.

Of Cæsar's immediate associates, Cassius, Brutus, and Antony are most interesting, if only for their important rôles in Shakespeare's "Julius Cæsar." Though showered with offices, Cassius, a malcontent, bore a grudge against Cæsar for being his master, and began to plot against him. He found many influential men, who, jealous of Cæsar's power, were themselves anxious to divide the spoils of government. To give the plot an air of respectability, he won over Brutus, ostensibly a student and man of letters, but at heart an unfeeling usurer. Appointed by Cæsar governor of Cisalpine Gaul and prætor, Brutus became an assassin of his benefactor.

Among the three near associates of Cæsar, Mark Antony was far the ablest, and possessed the merit of remaining faithful till the death of the benefactor. He had filled many military and civil offices with distinction, and was Cæsar's colleague in the consulship at the time of the murder. Shortly before this event, at a public festival, Antony offered Cæsar a crown, alleging that it was from the people. Although Cæsar would gladly have welcomed any device for legitimizing his rule, he refused the kingly title because of its unpopularity.

The assassination left Antony sole consul. Having control of Cæsar's papers and property, he skilfully used these advantages to make himself absolute. In a clever oration at the funeral he turned the feelings of the populace against the murderers, who thereupon fled from Rome. With young Octavianus (Octavius) he patched up a temporary alliance, and in combination they defeated the armies of Brutus and Cassius in the two battles of Philippi, 42 B. C. The beaten generals committed suicide, and the victors divided the empire between them, Antony taking the East and Octavianus the West. The later history of Antony is told in connection with Cleopatra.

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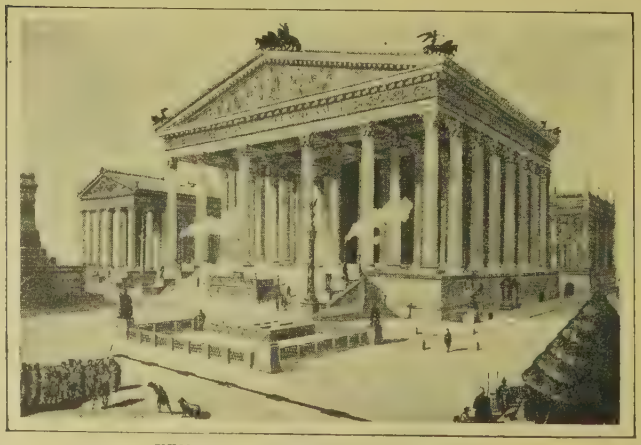
treasures, not only paintings and marbles, but works of great intrinsic value in bronze, silver, and gold. These confiscations and the subsequent taxes levied by the imperial government, together with the illegal exactions of officials, tended to impoverish the world for the enrichment of Rome and of the few citizens who monopolized the offices. The conquest differentiated the freemen of the empire into three distinct classes: the few wealthy Romans, who governed the world, the masses of Roman citizens who, though in possession of the right to vote had gained no advantage by the conquest, and the subjects, barred from all share in the imperial government and greatly oppressed by its officials.

JULIUS CÆSAR
In the Capitoline Museum, Rome

Rome became a great city with a population of about a million, who had gathered from all parts of the empire. Some had come as slaves, others to seek their fortunes, while others had been driven from the surrounding districts by the pinch of poverty. As freemen could find little work in the city, there grew up a great mob of idlers, who lived in large part on food doled out to them by the state as the price of their votes.

The ruling class was represented by the Senate, which was the chief governing body. Generally the senators were the most cultured and intelligent people at Rome; but they had all the faults of a narrow plutocracy; through long enjoyment of wealth and power the class was thoroughly corrupted and enfeebled. Hence the Senate proved incapable of governing and protecting the empire and even of preventing the frequent outbreaks of anarchy in the capital.



TEMPLE OF JUPITER—CAPITOLINE
As it appeared in the time of Cæsar

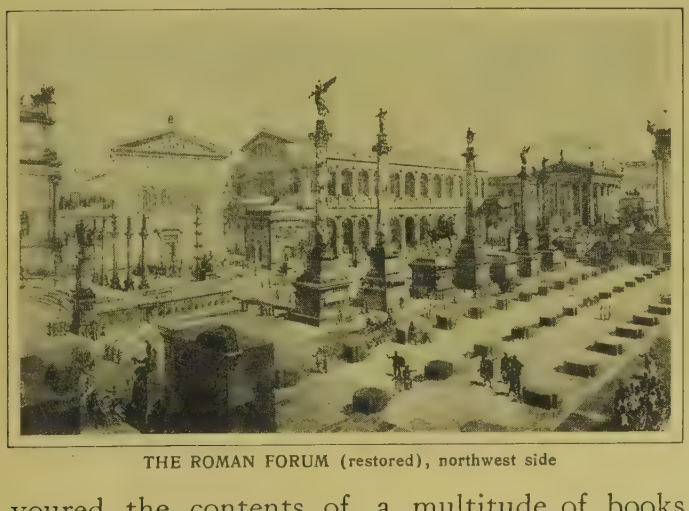
Early Life of Cæsar

Such in brief was the world in which Caius Julius Cæsar lived (100-44 B. C.) Belonging to the bluest-blooded aristocracy, he began life with all the advantages of wealth and family repute. As a boy and youth he enjoyed the best education of the time. It consisted mainly in the study and

imitation of Greek writers, especially orators, in preparation for a career as public speaker and statesman. Rome had derived her civilization from Greece; and every business man or diplomatist had to speak the Greek language, which was the chief medium of communication throughout the Mediterranean world.

In company with other young aristocrats Cæsar in early life indulged in all the dissipations and vices of his class. The foppish negligence of his attire proclaimed him a rake, while exorbitant luxuries, costly entertainments, forbidden love-intrigues, gambling—in brief, the indulging of a great variety of expensive tastes—exhausted his fortune and loaded him with debts so portentous that he could never hope to pay them by legal means. Through all these immoralities he kept a sound mind and a body capable of extreme activity and endurance, though in his later years he was subject to fainting and to epileptic fits.

The clearness and quickness of his intelligence was such that he could carry on several lines of thought and keep a number of stenographers* occupied simultaneously with his dictations. These extraordinary mental powers enabled him to master the most complex political situations and on the battlefield to turn many a defeat into victory. For the knowledge necessary to his manifold activities he devoured the contents of a multitude of books on a great variety of subjects. He was an orator of splendid power, a writer of clear and simple Latin, a man of scientific taste, interested in the customs and character of the peoples with whom he came in contact, and in the phenomena of nature; a general with few equals in the world's history, and a statesman variously estimated by modern historians.



THE ROMAN FORUM (restored), northwest side

At the beginning of his career he cast his lot with the popular party. This policy meant little more than a preference for dealing with the Assembly rather than with the Senate. In theory the Assembly comprised all the citizens; practically it was attended by the idler members of the populace. There was no democracy; for those citizens that lived too far from Rome to attend the Assembly had no voice in the government, and the vast majority of people in the empire were subjects. It was expected that a leader of the popular party should propose to the Assem-

*In that age stenography was a well-developed art, essential to the work of a secretary.

ROMAN LEGIONARY SOLDIER
From Duruy's "History of Rome"

and sold all the people as slaves. At another time he massacred an entire tribe, numbering more than four hundred thousand men, women, and children. The plunder, and especially the sale of captives, brought the victor enormous wealth, a part of which he devoted to buying supporters at Rome. After overawing Gaul with terrorism he adopted a policy of conciliation, by which he won the fidelity of the survivors. Although in entering upon the conquest Cæsar had merely his own aggrandizement in mind, he must in the end have come to an appreciation of the value of the new province to the empire. Even after the vast slaughter and enslavement of the bravest Gauls, the survivors were full of vitality. The country was rich in agricultural and mineral resources, and the Rhone River formed a convenient outlet for the country's products in the direction of Rome. This acquisition added great strength to the empire, and prepared the ground for the extension of Roman civilization into western and central Europe. The conquest was, in fact, the greatest achievement of Cæsar's genius.

No sooner had he finished this work than he came to blows with the Senate, which feared his towering ambition. A civil war ensued (49-45 B. C.) The champion of the Senate was Pompey, who also had met with great success in war. Though in appearance the struggle was between Cæsar and the Republic, its real object was to determine which of the two leading generals should be master of the Roman world. Pompey was defeated and killed; and in the end Cæsar subdued the whole empire to his will. He ruled as Dictator, appointed to that office by the submissive Senate.

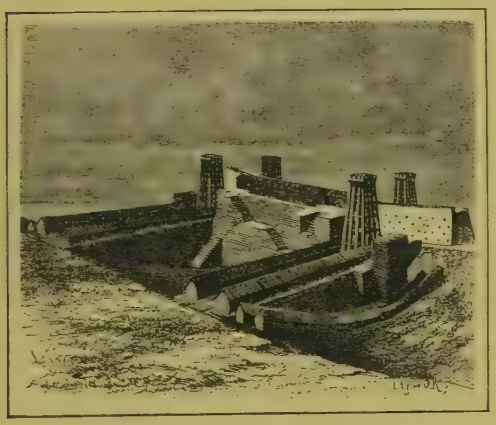
GALLIC SOLDIER

His Reforms as Dictator

During the civil war and the year following its close Cæsar gave attention to internal reforms. Humanely and prudently he forgave political offenders, and associated with himself in the government many who had fought against him in the war. He sought to reconcile old hatreds and to introduce an era of good feeling. There can be no doubt of his sympathy with the subject peoples. Those in authority in the provinces were no longer to enrich themselves and their

friends by oppression, but were held strictly accountable to the Dictator. Roman citizenship was a highly-prized possession, as it meant justice and an enviable social standing to the possessor. Cæsar granted it freely to individuals and to entire communities. Obviously, his aim was the rapid equalization of all freemen of the empire.

He took especial interest in public improvements at Rome. Among these works was the completion of the temple to Jupiter, Juno, and Minerva on the Capitoline Hill. The earlier temple had been destroyed by fire, and the construction of the new building required about thirty-six years. This was the largest and most stately temple in the city. Cæsar laid out a public square, named after his family the Julian Forum, in which he erected a temple to Venus Genetrix (ancestress), from whom he claimed descent. In it he placed a graceful statue of the goddess, carved by Arcesilaus, the most famous sculptor of the age. It is a remarkable example of clinging transparent drapery. In this public exhibition of his descent from a goddess Cæsar boldly displayed his egotism, which was further exalted by decrees of the Senate proclaiming him a god. It was not till after his death, however, that a temple was actually erected, at the east end of the Roman Forum, for his worship.* The Curia, Senate House, Cæsar began to rebuild, but its completion was left to Augustus, who named it the Curia Julia, after the Julian family, to which Cæsar, and by adoption Augustus, belonged. On the south side of the Forum he began the construction of the Basilica Julia, afterward finished by Augustus. It was a great hall intended for judicial and mercantile business. These are but a small part of the vast improvements that he planned for Rome, Italy, and the empire. The greater number remained mere schemes. To us the most interesting was the cutting of a canal through the Isthmus of Corinth, a work that has had to await the skill of the modern engineer.



ROMAN WORKS OF APPROACH
Showing parts of a Gallic wall in which stones are intermixed with beams

As supreme pontiff Cæsar was the head of the state religion and guardian of the sacred lore. In

ROMAN FASCES
Bundle of rods and axe bound together and borne before emperors and other rulers as symbols of power

*The temple of the deified Cæsar, the ruins of which is pictured in this number.

CLEOPATRA
In the Vatican Museum, Rome

his own, he could bequeath the regenerated world to his grandnephew Octavius, a youth of great promise whom he had adopted as a son.

From all that we can learn, however, success in the Parthian war would have been a catastrophe to European civilization. In wealth and population, in the resources of war and peace, the Oriental part of the empire would have overbalanced the European. The capital would have shifted to Alexandria or farther east; and Oriental absolutism would have dominated the civilized world. Three centuries after Cæsar, autocracy was to come even to Europe. It came with its bureaucratic accompaniment to destroy the little that remained of economic strength and intellectual freedom, and to drag to ruin the decaying civilization of the ancient world.

Cæsar, however, was not destined even to set out for Parthia. On March 15 (44 B. C.), the Senate met to take the last measures preparatory to his departure. The place of session was the Senate House which Pompey had built near his theater. Scarcely had Cæsar entered and taken his seat when a throng of about sixty senators gathered round him, pretending to greet him and to offer a petition. They were conspirators who had engaged in a plot for his assassination, through no especial love for the Republic, but for various personal reasons. Many had gained office and wealth under his patronage; but in their greed for greater wealth and political glory they lost all sense of gratitude. The best among them was Marcus Brutus, in his own social circle a philosopher and an idealist, but in business a hard, relentless usurer. Caius Cassius, the brain of the conspiracy, was a plunderer of the provinces and a robber of temples, whom envy drove into the plot. By such men was Cæsar slain. It was a crime perpetrated upon the civilized world, which had to endure thirteen more years of desolating civil war (44-31 B. C.), before Octavius, the young heir to Cæsar, could gain the mastery and bring the empire to peace.

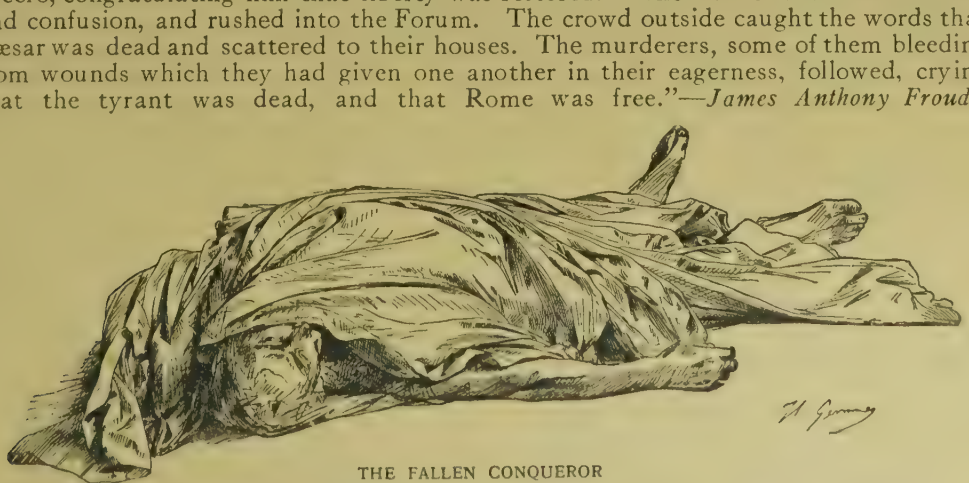
OCTAVIUS
Called "Augustus." In the Vatican Museum, Rome

This young man, known to history as Augustus, though less brilliant than his granduncle, possessed a far greater degree of practical wisdom. It was he, rather than Cæsar, who gave the Roman world an organization under which it was to enjoy more than two centuries of prosperity and happiness. Viewed in this light, the wisest act of the great Cæsar was the choice of this youth of delicately modeled features and frail body as his son and successor.

★ ★ ★ ★ ★ ★ ★

MARCUS BRUTUS
In the National Museum, Naples. Found at Pompeii

THE PASSING OF CÆSAR—"On March 15 (the Ides of March), 44 B. C., Cæsar entered the Senate Chamber and took his seat. His presence awed men, in spite of themselves, and the conspirators had determined to act at once, lest they should lose courage to act at all. He was familiar and easy of access. They gathered round him. He knew them all. There was not one from whom he had not a right to expect some sort of gratitude, and the movement suggested no suspicion. One had a story to tell him; another some favor to ask. Tullius Cimber, whom he had just made governor of Bithynia, then came close to him with some request which he was unwilling to grant. Cimber caught his gown, as if in entreaty, and dragged it from his shoulders. Cassius, who was standing behind, stabbed him in the throat. He started up with a cry, and caught Cassius's arm. Another poinard entered his breast, giving a mortal wound. He looked round, and seeing not one friendly face, but only a ring of daggers pointing at him, he drew his gown over his head, gathered the folds about him that he might fall decently, and sank down without uttering another word. Cicero was present. Brutus, waving his dagger, shouted to Cicero, congratulating him that liberty was restored. The Senate rose with shrieks and confusion, and rushed into the Forum. The crowd outside caught the words that Cæsar was dead and scattered to their houses. The murderers, some of them bleeding from wounds which they had given one another in their eagerness, followed, crying that the tyrant was dead, and that Rome was free."—*James Anthony Froude.*



THE FALLEN CONQUEROR
A reproduction of the pen drawing of the figure of Cæsar made by the painter Gerome as a preliminary sketch for his great picture of the assassination of Cæsar

SUPPLEMENTARY READING: JULIUS CÆSAR, by G. Ferrero; JULIUS CÆSAR, a sketch, by J. A. Froude; JULIUS CÆSAR, by W. W. Fowler (Heroes of the Nations Series); JULIUS CÆSAR, by J. Abbott; LIFE OF CÆSAR, in Plutarch's Lives.

*** Information concerning these books may be had on application to the Editor of The Mentor.

THE CONQUERORS

It is Human Desire that makes world history—desire for conquest, possession, and control. The Conqueror of the World must have his will. He treads the peoples of the earth under his feet, and spreads ruin in his path. He knows no social distinctions—this Re-molder of Humanity. The habitations of poor and rich alike are demolished, and the treasured possessions of city and town desecrated. Monuments of revered memory are razed to the ground, and new monuments to the Conqueror are raised to the sky. Nations are subjugated; governments are revised; territory is re-assigned; new laws are made. The people bow under the yoke; the Conqueror is enthroned with pomp and ceremony, and hailed as Master of the World.

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THE CONQUERORS

This powerful painting by Pierre Fritel pictures the grim progress of the great conquerors of the world through an avenue of death lined by the victims of the world's wars. Cæsar rides in the center—beside and behind are Tamerlane, Alexander, Attila, Charlemagne, Napoleon and other world conquerors.

And then—something happens that saves the world for the people. Some call it the "Hand of Fate"; those that live in the faith call it the "Will of God." But history tells us that final defeat awaits the man that aspires to be Conqueror of the World.

★ ★ ★

Tamerlane, the Tartar tyrant, called "the Scourge of God," swept the hordes of Asia before him in world conquest. He died suddenly while preparing to invade China. Alexander of Macedon, called "the Great," made himself master of the world of his day. He forestalled Fate by dissipating his young life away, and died broken-hearted, sighing for more worlds to conquer. Hannibal, the Carthaginian, carried the spirit of conquest across the Mediterranean to Spain, Italy, and over the Alps. He threatened Rome itself, and aspired to the overlordship of land and sea. Finally, defeated by Scipio Africanus, he was exiled to Syria, where, dishonored and deserted, he committed suicide. Julius Cæsar conquered all Gaul, and carried the standards of Rome to far-off Britain. The name of Cæsar became synonymous with conquest, so that it has been borne by successive emperors for centuries, and is, even in this day, the title of Imperialism. But Cæsar crossed the Rubicon, "and Rome was free no more." In the very fullness of his power he was assassinated by his own senators, his friend Brutus among them. "As he was ambitious," said Brutus, "I slew him. There is joy for his fortune; honor for his valor; and *death* for his ambition."

Napoleon Bonaparte gained leadership in France at a critical time, reconstructed her shattered institutions, and built up a military power that dominated all Europe. His ambition contemplated a personal supremacy of the Continent, with vassal nations paying tribute to his sovereignty. Beyond the bounds of Europe he carried conquest into Egypt, riding his charger to the foot of the Pyramids. But his over-weening ambition tempted him too far. As the crossing of the Rubicon sealed the fate of Cæsar, the crossing of the Niemen marked the beginning of Napoleon's downfall. With the Grand Army of more than half a million men, he invaded Russia, penetrating as far as Moscow. In a few months, with a pitiful, broken and ragged remnant of his forces, he recrossed the Niemen, minus glory and minus the trophies of war. Soon after, Napoleon met his Waterloo, and ended his days in lonely brooding, like an eagle chained to a rock, on the desolate island of St. Helena.

★ ★ ★

Sic transit gloria mundi—"so passes away the glory of the world"; so ends the career of the Conqueror.

ENTRANCE TO DOMINICAN CHURCH, CUZCO, PERU

RUDE and destructive as were most of the Spanish *conquistadores* (con-kees-tä-dō′-rays), many of them sympathized with the conquered people, and it is from the records of their impressions that we have obtained most of what we know about the Incas. Four of these Castilian diarists whose work is most valued were soldiers. Of their number, Pedro de Cieza de Leon (pay′-dro day see′-ay-sa day lay′-on) has given us the fullest and most interesting account of the ancient Peruvians. Only a boy of fourteen was he when he embarked on the Spanish Main, and he was only nineteen when, in 1538, he joined an expedition up the valley of the Cauca (kä-oo′-kä). He commenced his chronicle in 1541, and for ten years traveled from one end of Peru to the other, writing down his impressions as he went. The first part of his journal was published in 1554. Juan de Betanzos (hwän day bay-tän′-sos), another soldier, has left us but a portion of his work. We have only the record used by Friar Gregorio de Garcia (gray-go′-rio day gar-see′-a) in the first two chapters of his "Origen (o-ree′-hen) de los Indios," and an incomplete manuscript in the Escurial (ay-skoo-ree-al). This was edited and printed in 1880 by Jimenez de la Espada (hee-may′-nes day lä ay-spä′-dä). Betanzos' work is valuable, as he learned the Quichua (kee′-choo-a) language and was an official interpreter. Pedro Sarmiento de Gamboa (pay′-dro sär-mi-ayn′-to day gäm-bo′-ä), a militant sailor, accompanied the Viceroy Toledo (to-lay′-do), and was employed by him to write a history of the Incas. Finished in 1572, it is without doubt the most authentic and reliable we possess as regards the course of events. Pedro Pizarro, a cousin of the conqueror, was also a historian of merit, finishing the "Relaciones" (rā-lä-see′-o-nays) at Arequipa (är-ay-kee′-pä) in 1571.

The writings of lawyers have been of little value, although Prescott made use of the unpublished "Relaciones" of Polo de Ondegardo (po′-lo day on-day-gär′-do), written in 1561 and 1570.

The priests were the most diligent inquirers respecting the native religion, rites, and ceremonies. Vincente de Valverde (vis-ayn′-ta day väl-vayr-day) was the first priest to come to Peru, but he stayed only a short time and wrote very little. The best known clerical author is Josef de Acosta (hos′-ayf day ä-cos′-tä), who was in Peru from 1570 to 1586, and traveled over the greater part of the country. Cristoval Molina's (krees-to′-väl mo-lee′-na) "Report on the Fables and Rites of the Incas," written previous to 1584, is also valuable, for he was a master of the Quichua language. Fernando Montesinos (fayr-nän-do mon-tay-see′-nos), who, with his amazing list of kings, traced Inca ancestry back to Noah, was until recently given little consideration. But lately his work, "Ophir de España, Memorias Historiales (o-feer′ day ay-spän-yä may-mo′-ree-äs ees-tor-ee-a′-läs) y Políticos del Peru (po-lee′-tee-cos dayl pay-roo′)," written about 1644, has been given more credence, since it seems probable that much of it was based on the writings of Blas Valera (bläs vä-lay-rä). The premature death of the latter and the disposal of his valuable manuscripts is described by Markham as the most deplorable loss that Inca civilization has sustained. His work was used extensively by Garcilaso de la Vega (gär-see-lä′-so day la vay-gä), a grandnephew of the Inca Huayna Ccapac (wy′-nä k-kä′-päk). He is the most famous of all the historians, and is quoted some eighty times by Prescott.

The works of many of these authors and of others less famous are available today in English, as a result of the indefatigable efforts of Sir Clements Markham, whose translations have been published by the Haklyt Society. There are still many interesting and valuable old manuscripts reposing in the archives of Madrid (mäd-reed′) and Seville (say-veel′-yay), which have yet to be discovered, edited, and given to the world. Of the Spanish historians who have been engaged in this work, Dr. Marcos Jimenez de la Espada is probably the best known. An excellent bibliography of Peruviana has been prepared by Markham and is published in "The History of the Incas," Publications of the Haklyt Society, Series II, Vol. XXII, Cambridge, England.

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RUINS OF THE GREAT INCA TEMPLE OF VIRACCOCHA, NEAR SICUANI, PERU

TWO

THE Inca sovereigns about whom tradition tells us enough so that they may be considered historical personages are twelve in number. The first of these, Sinchi Rocca (seen′-chee rok-kä), or Rocca the Great, was the first ruler after the return of the Incas to Cuzco (coos′-ko) at the close of their long exile in Tampu-tocco (täm-poo-tok′-ko). He reigned from 1134–1197, according to the chronology of Dr. Gonzales de la Rosa (gon-sā-lays day lā ro′-sā), the most eminent of modern Peruvian historians. Rocca owed his position to a cleverly executed plot contrived by his mother. She dressed him in glittering gold apparel, and hid him in the Chingana (cheen-gā′-nā) Cave on Sacsahuaman (sāk-sā-wā′-mān) Hill. At intervals for several days excited Cuzqueñans (koos-kayn-yāns) beheld a golden vision moving on the fortress heights. Eventually, after their curiosity and fanatical credulity had been sufficiently aroused, the vision descended into the city. It gave itself over to the crowd, allowed itself to be conducted to the temple, and there proclaimed itself the adopted son of the Solar Deity. Under Rocca, the Temple of the Sun was enlarged and the city greatly improved.

There is some question among historians as to the acts of Rocca's successors, Lloque Yupanqui (lyo′-kay yoo-pān′-kee) and Mayta Ccapac (my′-tā k-kā′-pāk), who reigned from 1197–1246, and 1246–1276, respectively. Garcilaso (gār-see-lā′-so) records their conquering the Cana (kā′-nā) and Colla (kol′-yā) people in the southwest, building a Sun Temple at Hatun-Colla (ā-toom-kol′-yā), carrying on warfare along the shores of Lake Titicaca (tee-tee-ka′-ka), and Lake Aullagas (aul-yā′-gas), and on the west, going as far as Lake Parinaccochas (pār-een-āk-ko′-chās) and Arequipa (a-ray-kee′-pa). But the majority of historians represent the first three Incas as confining themselves more or less to the Cuzco Valley, and gradually, by diplomatic means, extending their influence over the surrounding inhabitants.

Ccapac Yupanqui (yoo-pān-kee), 1276–1321, made the region to the southeast the theatre of his operations, and Garcilaso credits him with reaching Potosi (po-tos′-ee). Inca Rocca, 1321–1348, improved the water supply of Cuzco (would that he might come again), founded schools, and militariwise, attempted to penetrate the Amazonian forests. His son, Yahuar-Huaccac (yā′-wār-wāk′-kāk) (weeping-blood), 1348–1370, was rather a nonentity. His name was acquired as follows, says tradition: While a child he fell into hostile hands. At the point of death he was seen to be weeping tears of blood. This so affected his enemy that he was permitted to live; he eventually escaped to his own people after a life of hardship among some shepherds.

He was followed by Uiraccocha (weer-āk-ko′-chā), 1370–1425, in whose reign occurred the invasion of the Chancas (chān′-kās). The invaders were finally driven out, chiefly through the bravery of his son, Pachacuti (pāch-ā-koo′-tee), who reigned from 1425–1478. Under this rule and that of his successors, Tupac Yupanqui, 1478–1488, and Huayna Ccapac (wy′-nā k-kā′-pāk), 1488–1525, the Inca dominion grew from a comparatively small confederation to the great imperial state found by the Spaniards. Huascar (wās′-kār), the successor of Huayna Ccapac, was overthrown and taken prisoner by his natural brother, Atahuallpa (ā-tā-wāl′-pā), about the time that Pizarro entered Peru. When the latter heard of the quarrel between the two brothers he determined to settle it. Fearful lest the decision should go against him, Atahuallpa had Huascar murdered, and this act provided Pizarro with an excuse for the execution of Atahuallpa.

After he had acquired complete control of the country, Pizarro elevated the Inca Manco (mānco) to the throne. This proud youth soon tired of the farce and fled to the fastnesses of the Vilcabamba (veel-cā-bām′-bā) mountains. Here he and his successors, Sayri Tupac (sigh-ree too′-pāk) and Tupac-Amaru (too′-pāk-ā-mā′-roo), maintained their independence until 1571, when the latter was captured by the Viceroy Toledo, brought to Cuzco, and there beheaded in the great square.

In 1781, a descendant of Tupac-Amaru bearing his name, led a revolt against the barbarous oppression of the Spaniards, only to fail and suffer torture, together with his whole family. In 1814, Pumacagua (poo-māk-ā′-wā), also of Inca ancestry, started an abortive uprising, which, although a failure, was the beginning of the struggle which was to eventually break the power of Spain in Peru.

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ALTHOUGH pacific by nature, the Incas built up their vast empire by conquest. Not one reign lacked great military campaigns, and in all of them the necessity of introducing the worship of the Sun gave rulers a pretext as plausible as the followers of Mahomet had for their great wars. Wherever it was possible, peaceful methods were employed. Persuasion, diplomacy and bribery were all tried; if these were unsuccessful, war was declared, but only after the failure of all the arts used in the acquisition of an empire by the most subtle politicians of a civilized land.

Immediately on the declaration of war, mobilization took place with extreme rapidity, for the Incas aimed early to secure such an obvious strategical advantage that their enemies would wisely surrender without a struggle. This was made possible by the remarkable series of roads constructed throughout the empire. In times of peace these served as post roads, which enabled the Incas to have surprisingly rapid intercommunication. At convenient places storehouses were located. These were always kept completely equipped, so that the mobilization of the Inca armies, which sometimes totaled 200,000 men, provided the minimum of inconvenience for the civilian population.

Contrary to the customs of some of our supposedly civilized modern nations, the Incas forbade their soldiers engaging in any unnecessary outrages, and punished such infractions of the law very severely. Even after the war had commenced, the Incas were always ready at any time to bring about peace. At the conclusion of hostilities they adopted the policy of the Romans, gaining more by clemency to the vanquished than by their victories.

As soon as the reduction of a country had been brought about, measures were taken to insure the loyalty of those newly conquered. The first step was the introduction of the worship of the Sun. No disrespect was shown to the local gods, but an acceptance of the priority of the Sun was always enforced. Often-times the peoples' own gods were treated as hostages and removed to Cuzco. The Inca system of government was, of course, always imposed. Land was cultivated according to the well-regulated schemes of the Incas, which included fertilization, crop rotation, and careful supervision to see that the desired amount of acreage was devoted to each product. The Quichua language was enforced. The new members of the empire were assigned their particular style of clothing and hair-dressing. Roads were built to all parts of the new territories and absolute amalgamation was eventually secured.

In some instances, where the loyalty of the conquered was doubtful, a portion of them were removed, bag and baggage, to some locality where they would be surrounded by inhabitants of whose loyalty there was no question. Some of the latter were then sent to occupy the lands of the exiles.

Through successive reigns the same policy was continued. Each Inca took up the work where his predecessor had been compelled to leave it, and tried to do his share in advancing the boundaries of the empire. Each Inca's life was a "crusade against the infidel to spread the worship of the Sun, to reclaim the benighted nations from their brutish superstitions, and to impart to them the blessings of a well-regulated government."

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LLAMAS LADEN WITH FAGOTS COMING INTO CUZCO, PERU

FOUR

ONE of the greatest aids to the Incas in extending their domains was their abundant food supply: the result, largely, of the great progress they had made along agricultural lines. Although Peru is a very mountainous country, by taking advantage of every available inch of fertile ground where the climate permitted the raising of crops, they were able to carry on a system of agriculture which, in the variety of products yielded, seems truly marvelous. It is stated by Mr. O. F. Cook, of the United States Department of Agriculture, that a complete census of the plants cultivated by the ancient Peruvians would probably include between seventy and eighty species.

The most important products are the maize and the potato, one world crop of which is today more valuable than all the gold the conquering Spaniards were able to take out of the country. The cultivation of corn goes very far back, for abundant specimens have been found in ancient graves, and the type of maize that furnishes the bulk of the Peruvian crop is peculiar to that region.

Other plants familiar to us are the pineapple, the sweet potato, peanuts, beans, Lima beans, guava (gwä'-vä), alligator pears, *papayas* (pä-pä'-yäs), and *chirimoyas* (chee-ree-mo'-yäs), as well as many with which we are not familiar, as *affu* (äf'-foo), *arracacha* (är-rä-cä'-chä), *tintin* (teen'-teen), *tomate* (to-mä'-tay), *purutu* (poo-roo'-too), *quinoa* (keen'-o-ä), *occa* (ok'-kä), and *ullucu* (ool-yoo'-koo). From the dried potato a nutritious flour was made called *chuña* (choon'-yä), which was used to thicken stews.

The coca plant (*Erythroxylon*) was widely cultivated, but in the days of the Incas, if we are to believe the historians, its use was regulated by the government. Commonly used today by their modern descendants, it is alcohol's most potent aid in the degradation of the Peruvian Indian.

We must not think, however, that the Incas were vegetarians. Although they lacked sheep, hogs and cattle, in the *llama* (lyämä) and *alpaca* they had excellent meat, as well as animals to provide them with wool, and in the case of the *llama*, a serviceable pack animal. The *guanacos* (gwä-nä'-kos) and *vicuñas* (vi-coo'-nyas), first cousins of the *llama*, were never domesticated, but were hunted in large drives superintended by representatives of the government. In the mountains there were rodents, such as the *viscacha* (vee-scä'-chä), *chinchilla* (cheen-cheel'-ya), and guinea-pigs. In the valleys there were monkeys and parrots. At the sea-shore and near the larger rivers fish were plentiful. Such excellent means of communication existed between the capital at Cuzco and the coast, that the Incas were kept constantly supplied with fresh fish.

The prevalence of both fishing and hunting is attested by the many depictions of these industries found on ceramic art objects which have been encountered by the archeologists. Hunting was carried on to such an extent, and the country in general was so intensively cultivated, that the Peruvian highlands today have less to offer the nimrod than any other section of the world equally uninhabited and desolate.

Alcoholic beverages were used, of course, but the government saw to it that their manufacture did not affect other industries. *Chica* (chee-cha) was made from both potatoes and maize, but the favorite brand was brewed from the *molle* (mol-yay) berry. Then, as today, religious feasts provided the common people with an opportunity for debauchery, but under the Incas there was less of the consequent inebriety.

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SACSAHUAMAN, THE INCAS' GREATEST FORTRESS, CUZCO, PERU

TOGETHER with the excellence of their governmental system and the extent of their food supply, the architecture of the ancient inhabitants of the Peruvian plateau establishes their claim to fame. Although early historians attempted to give the Incas themselves the credit for the wonderful structures to be found in Peru, it is generally believed today that most of the megalithic remains, such as Tiahuanaco, Sacsahuaman and Ollantaytambo, are the work of a people living many centuries before the Incas, whose own traditions carry them back only about 400 years prior to the coming of the Spaniards. However that may be, the ability to make equally fine structures evidently existed down to Spanish times, although in later years such work became less and less common.

There is a great uniformity in Inca architecture. In the highlands the edifices are usually built of porphyry or granite, and in the coastal regions more frequently of brick. The walls often have a thickness of several feet, but are rather low, seldom attaining more than ten or twelve feet in height. The apartments seldom open into each other—usually onto a court. The doors, which ordinarily provide the only entrance for light, are like the Egyptian, narrower at the top. The ruins at Machu Picchu (mā-choo peek'-choo) and in that vicinity are remarkable because windows are quite common in them. As the Incas had not evolved the arch, their doors, windows and niches were crowned with a lintel stone, in many cases necessarily a huge affair. Among the most interesting features of an Inca residence are these niches, probably used for shelves, perhaps for shrines, although if for that purpose there would seem to be more of them than necessary in most houses.

The fineness of the stonework is, of course, the most remarkable characteristic of the Incas' architecture. They seemed able to fit, with equal facility, blocks of stone weighing tons and those weighing but a few pounds. Although they are not known to have used the T-square, some of their angles are very true, and when it seemed desirable, they could build a straight wall. Particularly beautiful are some of their circular structures, such as the Temple of the Sun in Cuzco.

It is probable that only the temples and palaces of the rulers were so well built, and that the common people lived in houses of mud and stone. One of the most remarkable structures in Peru, the temple of Uiraccocha (u-eer-ăk-ko'-chă) at Racche (răk'-chay), shows a combination of fine stonework, and mud and stone. In addition, the upper part of these walls, which tower some thirty feet high, is of *adobe* (ă-do'-bay) only, and centuries of weathering has done but little more damage to the sun-dried bricks than to the granite foundations.

There is something incongruous in the fact that the roofs of the buildings walled so beautifully, and often covered inside with skilfully woven tapestries and gold adornments, were commonly of thatch. The rafters were of wood, tied on to ring stones and projecting cylinder stones with maguey withes. But, although they were ignorant of iron, did not even mortise their timbers, and were content with a dingy, unlighted interior, the buildings of the Incas were adapted to the character of the climate, and the wisdom of their plan is attested by the number which still survive, while the more modern constructions of the conquerors have been buried in ruins.

Providing they escape the destructive hands of the treasure-hunting Peruvians, only a gigantic cataclysm of the earth's surface can destroy these monuments to the stoneworking skill of Peru's ancient inhabitants.

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DOORWAYS IN INCA RUINS OF ROSASPATA

THE location of Vitcos (veet'-kos), or Pitcos (peet'-kos), the home of the Inca Manco after he fled from Cuzco to the wilds of Vilcabamba (veel-kä-bäm'-bä), was one of the questions which students of Inca history had never answered. Arm-chair archeologists and historians had selected the site of Choqquequirau (chok-kä-kee-rä'-oo) (cradle of gold), which consists of a series of extensive ruins above the Apurimac (a-poo-ree'-mak) River near Abancay (ä-bän-ca'-ee). His visit to these ruins convinced Dr. Hiram Bingham, of Yale University (now Lieut.-Colonel Bingham), that Vitcos and Choqquequirau could not be identical.

Accordingly, in 1911 he conducted an expedition to Peru, one object of which was to find a place that would fit the descriptions of the Inca's retreat as given by the early Spanish historians, some of whom, *i.e.*, Father Antonio de Calancha (än-to'-nee-o day cä-län'-chä) and Baltasar de Ocampa (bäl-tä-sär' day o-cäm'-pa), had actually visited Vitcos.

The expedition went down the Urubamba (oo-roo-bäm'-bä) Valley to the mouth of the Vilcabamba River, crossed the Chuquichaca (choo-kee-chä'-cä) Bridge, and went up the Vilcabamba Valley, finding place after place which tallied with the accounts of Ocampo (o-käm'-po) and Calancha (cä-län'-chä). Above the little town of Puquiura (poo-kee-oo'-ra) were encountered ruins now called Rosaspata (ro-säs-pä'-tä). Careful study has proved that these fit, in every detail, the description of the Inca's last home.

While on his way to Vitcos, Colonel Bingham was fortunate enough to discover the ruins of Machu Picchu. Although the problematical existence of these ruins had long been known, no one had ever taken the trouble to climb to the top of the ridge and make certain as to their location. In so doing, Colonel Bingham came upon ruins whose magnificent beauty alone makes them of more than ordinary interest, but doubly important is the discovery because in Machu Picchu we seem to have found at last the Tampu-tocco (tämpoo-tok'-ko) of early Inca legends.

The selection of Paccari-tampu (pak'-ka-ree-tam'-poo) as Tampu-tocco has never seemed justified. The slight similarity in name, the location of a few ruins and natural caves in that vicinity, and the non-existence of any place which had a better claim, made up the evidence to substantiate the theories of those who wished to call Paccari-tampu the cradle of the Inca race. Machu Picchu, as shown by Colonel Bingham,* corroborates in every detail the descriptions of Tampu-tocco given by all the historians.

In addition, it appears that Machu Picchu may also be Vilcabamba, the old, the mysterious place three days' journey from Vitcos, to which, as told by Father Calancha, two monks were taken by the Incas while they were in that region seeking his conversion. No situation at all plausible has ever been suggested for this mythical locality. Granting that Machu Picchu is Tampu-tocco, the presence of two distinct cultures and skeleton remains, chiefly of women and effeminate men, would seem to indicate that on his retreat to Vitcos the Inca Manco made use of the wonderfully concealed first home of the Incas to provide safe retirement for the priests and priestesses of the Sun.

A very important part of the work of modern archeology lies in identifying the location of the cities and towns which have a place in Inca tradition and history. The finding of the first and last home of the Incas by Colonel Bingham's expeditions is only the beginning of a great deal of similar work which awaits the archeologist in Peru.

* See The Story of Machu Picchu, by Hiram Bingham, Nat. Geo. Mag., Feb., 1915, and Vitcos, ibid., Proceedings of the Am. Antiquarian Soc., April, 1912.

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RUINS OF MAUCALLACTA, PACCARITAMBO—Near view of the gateway

THE INCAS

By OSGOOD HARDY, M. A.

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MENTOR GRAVURES

RUINS OF A TYPICAL INCA CITY · SACSAHUAMAN, THE INCAS' GREATEST FORTRESS, CUZCO, PERU · ENTRANCE TO DOMINICAN CHURCH, CUZCO, PERU
DOORWAYS IN INCA RUINS OF ROSASPATA · LLAMAS COMING INTO CUZCO
RUINS OF THE GREAT INCA TEMPLE OF VIRACOCHA, NEAR SICUANI, PERU

NOTE.—All pictures in this Mentor are reproduced by permission of the National Geographic Society and the South American Exploration Fund of Yale University, under whose auspices the Peruvian Expeditions directed by Dr. Hiram Bingham have taken place.

THERE is probably no part of the world that stimulates more curiosity in an archeologist or even in a casual traveler than that part of South America which was once inhabited by the Incas of Peru. Tiahuanaco's (tee-ä-wane-ä′-ko) finely carved gateway and its ponderous stone platforms, Sacsahuaman's (saks-ä-wa′-män) gigantic walls, Ollantaytambo's (ol-yän-tie-tam′-bo) monolithic fortress, and Machu Picchu's (mä′-choo peek′-choo) picturesque grandeur fill one with an admiration for their builders which is only equaled by the sorrow that today, over three centuries after the advent of Pizarro (pee-sä′-ro) and his *conquistadores* (con-kees-tä-do′-rays), we can do little more than make conjectures concerning the ancient Peruvians.

And, furthermore, it is doubtful if we can ever go very far in solving the problem of man in the Andes. Although they made great progress in architecture, agriculture, engineering, and the science of government, the ancient Peruvians did not achieve the art of writing, nor did they

NOTE ON PRONUNCIATION.—The letter "*a*" with two dots above is pronounced as in "father"; the "ā" with a horizontal line above is pronounced as in "ray."

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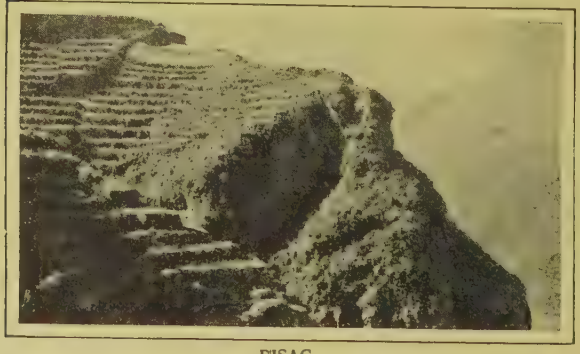
even reach the stage of hieroglyphics. Their records were kept on *quipus* (kee-poos), variously colored strings with many different kinds of knots. These seem, however, to have been used only for accounting purposes. Thus far, the *quipus* in possession of our archeologists have been of no particular aid in deciphering the history of their makers. Accordingly, what we know of the Incas consists of traditions gathered together by early Spaniards, and the work of present-day students who, by modern archeological methods, are slowly bringing some light to bear on this apparently insolvable problem.

RUINS OF PATALLACTA—A Typical Inca Temple

Origin of American Aborigines

Although there are many ideas advanced as to the origin of the American aborigine, it is commonly believed that he came from northeastern Asia and gradually moved southward. Archeologists and geologists are all agreed that he arrived at the close of the glacial epoch, long after the disappearance of the prehistoric animals which Dr. Matthew described for Mentor readers some time ago. When he came to this continent he had probably already reached the higher stages of the Stone Age, and was possibly already in the Bronze Age. Just how long it has been since his arrival we cannot tell.



PISAC
Terraces below the principal ruins, still used for growing wheat and barley

Although the number of traditions concerning the origin of the Inca empire is legion, the two best known are the Titicaca (tee-tee-kä′-kä) and Tampu-tocco (tämpoo-tok′-ko) legends. The former has been given us by the immortal Prescott, relying on the Commentaries of the Inca Garcilaso de la Vega (gär-sil′-ä-so day lä vay-gä). From him we know there was a time

when the ancient races of the continent were all plunged in deplorable barbarism. "The Sun, the grand luminary and parent of mankind, taking compassion on their degraded condition, sent two of his children, Manco Ccapac (män′-ko k-kä′-päk) and Mama Occlo (mä′-mä ok′-klo), to gather the natives into communities and teach them the arts of civilized life. The celestial pair, brother and sister, husband and wife, advanced along the high plains in the neighborhood of Lake Titicaca to about the 16th degree south. They bore with them a golden wedge, and were directed to take up their residence on the spot where the sacred emblem should without effort sink into the ground. They proceeded but a short distance—as far as the valley of Cuzco (koos′-ko), the spot indicated by the performance of the miracle; there the wedge speedily sank into the earth and disappeared forever. On this spot the children of the Sun established their residence, and laid the foundations of the city of Cuzco."

DOORWAY

In ruins, now known as Rosaspata, but which Dr. Bingham has shown are probably those known to the Incas as "Vitcos," the last home of the Incas

The Titicaca myth, however, does not receive as much consideration today as the Tampu-tocco (täm′-poo-tok′-ko) myth. The former is characterized by the late Sir Clements Markham as an obvious invention to account for the ancient ruins and statues in the vicinity of Tiahuanaco (tee-ä-wane-ä′-ko), and on the islands of Titicaca and Koati (ko-ä′-tee). "It has no historical value," he says, "while the Tampu-tocco myth is as certainly the outcome of a real tradition, and is the fabulous version of a distant historical event."

The story is somewhat as follows. At a distance from Cuzco is a place called "Tampu-tocco" ("House of the Windows"). This was long considered to be identical with "Paccari-tampu" (päk′-kä-ree-tam′-poo) ("House of the Dawn"), but the explorations and study of Dr. Bingham have shown that the evidence is in favor of his statement that Machu Picchu is Tampu-tocco. From this locality, at a

RUINS OF PATALLACTA

Showing niches with holes for bar locks in the upper room of the temple on top of the rock

INCA FORTRESS WALL, SACSAHUAMAN

The gigantic size of the stones and the precision with which they are fitted, without mortar, bear testimony to the engineering genius of the Inca megalithic builders

date placed by students somewhere between 950 B. C. and 200 A. D., came four brothers accompanied by four sisters. Their leader, Manco (män′-ko) (the princely), succeeded in making away with his three brothers, so that at length, on their arrival at Cuzco, where the golden rod which this Manco also carried sank into the ground, the first Inca and his sisters were able to found their kingdom without rivals. Under the leadership of Manco and his successors, sometimes known as "Pre-Megaliths," the empire grew. In the seventeenth or nineteenth reign a change in dynasty took place, and thenceforth the megalithic monarchs, who were often distinguished and skilful astrologers and reformers, ruled with the title of Amauta (ä-mä-oo′-ta).

About 450 A. D. came the end of this dynasty. Pachacuti (pä-chä-koo′-tee) VI, a ruler of peoples on the east, south and west and subject tribes, had risen in revolt. The invaders ultimately retired, but the power of Cuzco was broken, and the ruler slain. The city was left to the priests, and the inhabitants, under a new sovereign, took refuge at Tampu-tocco, where some twenty-four princes ruled in succession. At length, when the provinces once under the control of the princes of Cuzco had relapsed into barbarism, a woman of high birth named Siyu-yacu (see′-yoo-yä′-koo), contrived a plot to place on the throne one who would initiate a bold attempt to recover the power once possessed by their forefathers. The individual selected was Siyu-yacu's own son, Rocca (rok′-kä). The plot was successful, and Rocca, later known as Sinchi Rocca (seen′-chee rok′-kä) or the Great Rocca, was the first of the Inca sovereigns whose reign looms up clearly enough to remove it from the realm of traditions and give it a place, although slightly hazy, in history. From the accession of Rocca to the throne, about 1100 A. D., down

CUZCO, PERU

PALACE OF THE INCA ROCCA

A large gravure picture of this massive structure will be found in The Mentor (No. 132) on "Peru"

to the murder of Tupac Amaru (too′-päk ä′-mä-roo) in 1671 by the Viceroy Francisco de Toledo (frän-sees′-ko day to-lay-do), the course of events is fairly well authenticated. It is to this period that a discussion of the Incas must necessarily be confined.

When the Spanish Came

When the Spaniards arrived, the little kingdom of Cuzco had already grown to an empire that extended to the equator on the north, and was bounded on the south by the River Maule (mä′-oo-lay) in southern Chile (chee′-lay). On the west it extended to the Pacific Ocean, and on the east faded away in the torrid forests of the Amazon and the rolling hills of the Argentine uplands. The Incas had succeeded in conquering the many tribes scattered over this whole region, and for the most part had enforced the use of their own language, the Quichua (kee′-choo-a). They had evolved a system of government which, expanding from that of a village community, had met the needs of a vast empire; and they had done it so gradually that the inhabitants at large had been conscious of little change save in the direction of increased prosperity and security.

ALPACAS

A semi-domesticated animal resembling sheep, and yielding a long, fine wool, usually brown or black

Inca Government and Religion

The Inca government was a despotism. The Inca—the chief magistrate of the dominant tribe—had absolute powers, and as a direct descendant of the Sun was also vested with sacred attributes. Surrounding him and under him were his immediate family. His official wife was his sister, and from their offspring was chosen the successor of the Inca. The elder was usually designated, although this rule was broken in several instances where the younger brother seemed more able. Next in the social scale were the nobles, or *orejones* (o-ray-ho′-naze), as they were called by the Spaniards. These officials wore very large earrings. The lobe of the ear was often distorted so that ornaments several inches in diameter were inserted.

GROUP OF LLAMAS IN JULIACA

MACHU PICCHU RUINS
General view, showing growth covering ruins

Under the *orejones* came the *caracas* (cä-rä′-cäs), or inspectors, who had charge of the census, the estimation of local resources, and the imposition and collection of tribute. Their work was chiefly administrative, and the actual government was left to district magistrates and judges, who acted as tax-collectors also. Finally, there were the common people. These were divided for military purposes into 10s, 100s, 1,000s, and 10,000s, and the mobilization of the Inca armies was almost Teutonic in its ease and precision.

As might be expected, the Inca religion included the worship of many things. The priestly historians always characterize it as extremely vile; but those of Inca ancestry insist that it was remarkably pure and spiritual, consisting of only one true worship, that of the Sun. Only those that have experienced life in the Peruvian highlands and have endured the enervation of its cold altitudes can realize how certainly must the early peoples have turned to the worship of that force which alone makes life endurable or possible on the Peruvian plateau.

The places of worship were usually temples, so located as to catch the first rays of the rising sun. *Huacas* (wä′-käs), such as large rocks or springs, were, of course, worshiped where they were situated, and oft-times were surrounded by temples. In the case of stones, shelves or platforms were carved, on which the priests stood while making their offerings to the Sun god.

OLLANTAYTAMBO—The Town and Fortress

The worship was carried on by priests and *mamaconas* (mä-mä-ko′-näs), the latter, the priestesses, directed the lives of the virgins of the Sun. The most

MACHU PICCHU
Sacred Plaza and Intihuatana Hill

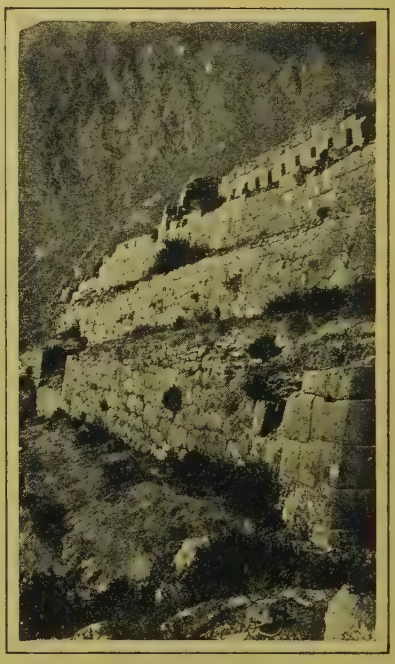
beautiful girls of the kingdom were gathered together from all parts of the land. The most attractive became the wives of the Inca, after they had passed through a severe training in the various feminine arts; others took the vows and became *mamaconas*, while the rest either became wives of the nobles or were sent back to their homes.

Many different feasts were celebrated, the most famous being those of Intip Raymi (een'-teep ryc'-mee) and Situa (see'-too-a). The former was celebrated in June at the winter solstice, the object being to secure the return of the Sun. It lasted for nine days, was celebrated by all the ruling caste, and was always successful. Situa was celebrated in August, and the movable *huacas* were transported to Cuzco from all over the empire. There were also many feasts of local and family significance, as those of name-giving and adolescence.

The rites of worship were sacrifice, prayers, confession, and fasting. Although there has been a great deal of controversy over this point, it is generally accepted that, unlike the Mexican peoples, the Incas did not make human sacrifices. Offerings of food, libations and animal sacrifices were the customary procedure. Some of the Inca prayers which have come down to us are remarkable for their beauty and spiritual qualities. Confession was made to a priest. Fasting was usually observed by those desirous of entering some sacred spot, as at the end of a pilgrimage, and is said to have been at times of twenty days' duration. The more famous pilgrimages were those to Pachacamac (pä-chäkä'-mac) and Titicaca.

OLLANTAŸTAMBO—The Fortress

Peasant and Labor Conditions



OLLANTAYTAMBO
Lower terrace of Fortress

"The condition of the peasant in Peru," summarizes Mr. T. A. Joyce, "approximated nearer to the ideals of the doctrinaire socialist than in any country of the world. But it was at a price which, perhaps, the native of no other country would consent to pay. From the cradle to the grave the life of the individual was marked out for him; as he was born, so would he die, and he lived his allotted span under the ceaseless supervision of officials. His dress was fixed according to his district; he might not leave his village except at the bidding of the state, and then only for state purposes; he might not even seek a wife outside of his own community. An individual of ability might, perhaps, rise to be one of the subordinate inspectors, but the higher ranks were inexorably closed to him."

Because of this despotism, which placed all the labor in the hands of the state, the Incas were able to achieve marvels in the way of building, road-making, irrigation works, and agricultural engineering. Inherently an agricultural people, the greatest efforts of the ancient Peruvians seem to have been exerted, not in building tombs for the dead, as did the Egyptians, but in making conditions better for the living. It is true that a great deal of labor was expended on the wonderful palaces of their rulers. Each successive Inca thought it necessary to rear an edifice for himself. But the greater part was employed for the benefit of the country as a whole, in irrigation and other projects. Water was brought many miles, and regions which today are desolate through the Spaniards' failure to keep in repair the ditches and canals were flourishing agricultural communities in the days of the Incas. Rampant streams that threatened to destroy fertile valleys were penned within stone walls. Roads made throughout the whole dominion were useful, of course, for the transportation of troops, but especially valuable because the intershipment of crops was thereby made easy.

THE CONCACHA STONE
A famous "Huaca" (meaning "holy"). The name was applied to material objects, such as rocks, etc., which were worshiped

Agriculture and Architecture

As might be expected in a mountainous country, where a wide stretch of level ground is but seldom encountered, the construction of miles upon miles of terraces was necessary. "Many slopes," writes Mr. O. F. Cook, of the United States Department of Agriculture, "have more than fifty terraces, forming huge staircases as high as the Washington Monument, resting against the lower slopes of mountains that tower thousands of feet above."

The stonework of the prehistoric builders excites the wonder and admiration of the beholder—admiration for the grand and beautiful simplicity of the Inca masonry, wonder as to the methods employed in its accomplishment. What the means were we do not know—at best we can only conjecture. The modern Indians—in fact, many of the upper class of Peruvians—prefer to explain it by magical methods, such as softening the rocks by rubbing them with the juice of some plant or fruit. Only the combined labor of hundreds of people, understanding the lever and the inclined plane, could have moved some of the huge rocks that form many of the walls. And moving them would be the easiest part of the work. How they succeeded in fitting these monoliths together, so that in places the joints are too fine for the naked eye to discern, is quite beyond the ken of the modern stone-worker. Formerly it was thought that the larger terraces were chiefly for defensive purposes; but the fact that these, as well as those more plainly agricultural in character, show the underlying strata of stones to be covered with fine agricultural oils that must have been brought from a distance, would indicate, according to some of our scientists, that these also were used to produce crops. The importance attached to agriculture can be understood from the fact that the majority of the terraces equal in fineness of masonry even the

MACHU PICCHU
Intihuatana Hill and Stairway

RUINS ON KOATI ISLAND
The famous Island of the Moon

palaces of the Incas. Lacking timber, the Incas used stone as the chief building material, and, although they had not evolved the pure arch, they had learned to secure strength through the keying together of irregular blocks, and, as Dr. Bingham writes, "had developed many ingenious devices, such as lock-holes for fastening a bar back of the door; ringstones, which were inserted in the gables to enable the rafters to be tied on; and projecting cylinder stones, which could be used as points to which to tie the roof and keep it from blowing off."

RUINS OF TORONTOY
The man is seated on a carved rock, probably an altar

Sculpture existed only in a rude form, and the decoration of Inca pottery did not equal that of the coast people. Their ceramic products are marked by simple and graceful lines, rather Grecian in effect, and of striking simplicity and utility. They had arrived at a high degree of skill in the manufacture of textiles, for the *llama* and *alpaca* provided them with excellent raw material.

Although they were unfamiliar with refined methods of heat treatment, and so were compelled to sacrifice extra hardness and strength by increasing the tin content, they had learned the art of cold working, and produced many kinds of bronze implements. Some of these were of an excellent temper, and, together with obsidian knives, were used for trepanning. Inca methods of warfare, the use of slings and war clubs, naturally caused many wounds which could be relieved only by such operations.

RUINS OF TORONTOY
Showing window, a projecting cylinder stone and lock-hole

In war their skill was defensive rather than offensive. They built salients and re-entrant angles in their walls, and dry moats are often encountered.

They domesticated the South American camel (the *llama*), which enabled them to carry out engineering and agricultural works far more difficult than they could have accomplished had they been obliged to depend on human bearers. In addition to maize, potatoes, and cassava, they had many other important crops, such as pineapples, peanuts, and cotton. Great is the treasure of precious and base metals which has come, and is to come, from Peru. But that sinks into insignificance

beside the value of one corn and potato crop throughout the world. And in the future it seems not at all unlikely that the Incas, famous for centuries for their system of government, their masonry, and the treasures which the Spaniards took from them, will be yet more famous for the extent to which they developed agriculture.

INCA IMPLEMENTS

★ ★ ★ ★ ★ ★

We can do no better, in closing this account of the old Peruvian empire, than to quote from Mr. Prescott's imperishable work, "The Conquest of Peru," the following summary of the characteristics of Inca culture:

INCA POTTERY AND INSTRUMENTS

"Under the rule of the Incas, the meanest of the people enjoyed a far greater degree of personal comfort than was possessed by similar classes in other nations on the American continent—greater probably, than in feudal Europe. Under their scepter, the higher order of the state had made advances in many of the arts that belong to a cultivated community. By the well-sustained policy of the Incas, the rude tribes of the forest were gradually gathered within the folds of civilization, and of these materials was constructed a flourishing and populous empire, such as was to be found in no other part of America."

SUPPLEMENTARY READING

EARLY MAN IN SOUTH AMERICA
By Ales Hrlicka
Bureau of American Ethnology, Bulletin 52

HISTORY OF THE CONQUEST OF PERU
By W. H. Prescott

THE INCAS OF PERU
By Sir Clements R. Markham

SOUTH AMERICAN ARCHEOLOGY
By Thomas A. Joyce

STAIRCASE FARMS OF THE ANCIENTS
By O. F. Cook
National Geographic Magazine, Volume 29, No. 5

FURTHER EXPLORATIONS IN THE LAND OF THE INCAS *By Dr. Hiram Bingham*
National Geographic Magazine, Volume 29, No. 5

THE STORY OF MACHU PICCHU
By Dr. Hiram Bingham
National Geographic Magazine, Volume 27, No. 2

THE OPEN LETTER

We are indebted to Dr. Hiram Bingham and his Peruvian Expeditions for the interesting picture material in this number of The Mentor. Dr. Bingham (Lieut.-Colonel Bingham) became interested in South America when he was in Yale University, and in 1906 he took an expedition over the historic march of Bolivar from Venezuela to Colombia. Two years later, when Colonel Bingham was appointed a delegate to the first Pan American Scientific Congress at Santiago, Chile, he went there by way of Bolivia and Peru, and, while in Peru, he visited the ruins of Choqquequirau (meaning the "cradle of gold"), said to be the last home of the Incas.

★ ★ ★

Colonel Bingham's studies led him to think that the legend was wrong. So, in 1911, he set off to Peru, with a party of six, his objects being to hunt for "Vitcos" (the name of the last home of the Incas) and to make an ascent of Corropuna, reputed to be a rival of Aconcagua for the honor of being the highest mountain in South America. The expedition was very successful. Corropuna was scaled, and found to be somewhat lower than Aconcagua. Vitcos was found at Rosaspata and not at Choqquequirau. The reputed bottomless lake of Parinaccochas was found to be no more than four feet in depth, and, best of all, Machu Picchu was discovered.

★ ★ ★

All this was so important that the National Geographic Society decided to assist in another expedition to carry on the good work. Accordingly, the Peruvian Expedition of 1912, under the auspices of Yale University and the National Geographic Society, was sent out. It cleared the way, photographed and mapped Machu Picchu, and made many other explorations. A report of this expedition was received with so much interest, and the pictures were considered so beautiful, that the Peruvian Expedition of 1914-1915 was organized under the same auspices. This expedition accomplished a great amount of additional work in the way of map making and archeological research, collecting flora and fauna from districts previously unvisited, and determining the location of several rivers.

MONOLITHIC GATEWAY AT TIAHUANACO

★ ★ ★

A vast amount of important historical material has been gathered by these expeditions, and The Mentor is very fortunate in being permitted to use photographs collected in the course of the expeditions, and in having a member of the party as author of this article. In connection with Mr. Hardy's account of the Incas, Colonel Bingham writes to The Mentor as follows:

"Within the confines of the ancient Inca empire, the archeologist can find a field for work, which, in the beauty of its natural surroundings, and the healthfulness of its climate, together with the interest lent by the present-day inhabitants, is equal, if not superior to, any other part of the earth's surface.

"In the past, its comparative inaccessibility has been a very great deterrent to systematic work in the regions once occupied by the Incas. Now, better steamship connections with the rest of the world, and increasing railway mileage within, have greatly lessened the transportation difficulties.

"The solution of the problem of man in the Andes has only begun, and it is to be hoped that American students will have many future opportunities to enter this field of research."

W. D. Moffat

EDITOR

PHOTOGRAPH BY GERTRUDE KÄSEBIER

AUGUSTE RODIN

"In art, to admit only that which one comprehends leads to impotence. Nature is full of unknown forces."—*Auguste Rodin.*

RODIN was not only a great emotional sculptor: he was a great intellectual force,—a rushing human tornado, if you will, that swept into and through the artistic world with a power almost terrifying, to clear the atmosphere, and to render not only his chosen form of expression—sculpture—pure and inspired as it was in the days of the Greeks, but to quicken and revive all other expressions of art. Every maker of beautiful things—in form, in color, and in words—has a clearer and a bigger idea of art in general and of his own art in particular because of Rodin. Therefore, it behooves all thinkers and educated persons to learn something of his life and to study his art, his theories, and his writings.

François Auguste Rodin was born in Paris, November 12, 1840, of very poor parents. At the age of fourteen he decided to become an artist, his gift for drawing being extraordinary. He entered the *Petite École* (The Free School of Design), in the old *Rue de l'École de Mèdicine*, and here one day he joined the modeling-class.

He immediately began to study the antique. Working in clay was a revelation: Rodin became obsessed with the pleasure of manipulating the soft material. He had found his true path!

Even at this early age Rodin was an indefatigable worker. At seventeen he had finished his first studies and was ready for the *École des Beaux Arts*. He began to prepare himself for examinations so that he might compete for the coveted *Prix de Rome*—the prize that gives to its lucky winner free study in the Eternal City.

Rodin was rejected! He was now eighteen, and without means. He was forced to gain money in any way he could. Once he mixed drugs for an apothecary. After a time he became a journeyman ornament-worker; and he was quick to get such help and encouragement as possible from the sculptor for whom he occasionally worked. At twenty-three he entered the studio of the fashionable sculptor Carrier-Belleuse, and executed many statuettes and figures for him. In any way and every way he could, he earned his daily pittance, never dreaming that the future would bring him enormous fortune and great renown. During this period Rodin sometimes had the privilege of criticism from Barye, the great animal-sculptor. Impressed by the face of an old shepherd, flat-nosed and anguished by the experiences of life, Rodin modeled the "Man with the Broken Nose," which he cast in plaster and sent to the Salon of 1864. It mystified the jury and was rejected. The work is now considered a masterpiece.

Rodin was in Paris during the Franco-German War of 1870, after which he lived in Brussels and Antwerp. He worked diligently in these cities, while Rosa, afterward his wife, did the housework, posed for him, helped moisten his clay, and was, as she proudly said, his "*garcon d'atelier*" (garsong da-tel-ee-ay) (studio-boy). At this period Rodin also painted many landscapes in oil and modeled from a young Belgian soldier "The Bronze Age," or "The Man Who Awakens to Nature," over which he worked for eighteen months. It was a creation. The plaster model appeared in the Salon of 1877 and attracted much attention. It was so true to life that some critics declared it to be a cast! In 1875 Rodin traveled to Italy, and in 1877 made a tour through France. The rest of his life was uneventful as far as action was concerned. Fortune lavished her favor upon him, and he put forth masterpiece after masterpiece. His two homes became famous. The Hôtel Biron in Paris and the Villa Meudon in the Valley of the Marne attracted visitors and students from far and near, not only to see the work of the Master, but to come in contact with his marvelous personality.

It was after the Exposition of 1900, when Rodin's works were shown in a pavilion in the *Place de l'Alma*, that his enormous vogue began. After the Exposition was over, this pavilion was recreated in the garden at Meudon and filled with masterpieces. It has been visited by hundreds of art-lovers of Europe and the United States. And sovereigns, too, went there to honor the great sculptor.

On the death of Whistler, Rodin was made president of the International Society of Painters, Sculptors and Engravers. Oxford University gave him a degree. When the war of 1914 broke out, Rodin was in his villa at Meudon. He fled to England, accompanied by his wife. The Battle of the Marne saved the museum at Meudon, as it saved the whole of France. Five years before his death, which took place at Meudon, November 17, 1917, Rodin offered his home and treasures to the French nation, and in 1916 the Chamber of Deputies voted to accept the gift. The Hôtel Biron, with its works by Rodin and its art treasures, was formally turned over to the French nation. It is valued at $400,000.

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SITUATED IN FRONT OF THE PANTHEON, PARIS

THE THINKER. By Rodin

"The great things in life are not the exceptional things, but the beauties of every day which we do not stop to notice. These vast treasures, within our grasp, which we do not even touch, are the things that count."—*Auguste Rodin.*

ALTHOUGH fond of his friends, Rodin was a recluse. He never went into society; he attended no great functions; he never permitted himself to be "lionized." In his early life and middle years he was painfully shy, he even used to blush when spoken to; but later, when conscious of his power and renown, his timidity disappeared and Rodin became a ready talker.

The Rodin that one thinks of is the Rodin of later years, Rodin in the culmination of his power and in the full light of glory. No artist—unless it was Rubens—ever had such wealth and honor poured upon him by the capricious goddess Fortune.

To the average person, Rodin seemed ordinary in appearance, being of medium height, with broad shoulders and large limbs. He was heavy and thick-set. Those who observed deeper noticed his magnificent head, with its intellectual forehead—truly the frontispiece of a massive brain—a full, snowy beard, and wonderful eyes of gray-blue, very piercing in their gaze and very brilliant in their ardent fire. Rodin's was the head of the Olympian Jove; indeed, he was of the race of the gods himself. There was something elemental and remote in his very simple but strong personality. If his hand was that of a creator, so was his mighty brain. Rodin's mind sought great things. He was a passionate reader all his life. He absorbed the Greek poets and dramatists, the Roman historians, Shakespeare, Dante, Victor Hugo, and Baudelaire. He joyed in the Gothic cathedrals and their sculptors and in the Renaissance architects and sculptors, as he joyed in ancient Greek sculpture and architecture; for he found his way through all great things to the fount of Nature. There lies the secret of Rodin's greatness. He went straight to Nature herself: in the firmament of heaven and in the tiniest flower in his garden he sought and found the spirit of truth and the spirit of beauty. All of his writings speak of Nature's teachings. "It is not *photographic* truth, but *living* truth, that we must seek in art," was one of his axioms.

"Judged by his work," writes a French critic, "Auguste Rodin is the most modern of artists; judged by his life and character he is unquestionably a man of bygone days. As a sculptor, he is such as were Phidias (fid'-ee-as), Praxiteles (praks-it'-e-leez) and the master-architects of the Middle Ages,—that is to say, he is of all times. One single idea guides his thoughts, one single aim arouses his energies—*Art through the study of Nature.*

"It is by the concentration of his unusual mind on a single purpose that he attains his remarkable understanding of man, physical and moral, and of the spirit of our age. In the life-like features of his statues he inscribed the history of the day. They seem to live, and the potency of their life enters into us and dominates us. Through this secret of genius his statues and groups have an individual charm. They have taken their place in the history of sculpture. There is the charm of the unique, the charm of the Gothic and the charm of Michelangelo. There is also the charm of Rodin."

This charm is due to the poetry in Rodin's nature; for Rodin was a poet who expressed himself in marble. Take such a work as the "Danaide," for instance, a nymph of the woods crumpling herself up to sink into the hollow trunk of a tree; take the lovely "Spring"; take the wild visage of the tigerish "Tempest," breathing passion and fury; take the beautiful face of the "Village Fiancée," with downcast eyes and veiled lids, and tender, deep shadows produced by the rustic cap,—a face as gentle as a portrait by Greuze; take the noble "Minerva," with her serene smile of wisdom, her casque and her armor so decorative with its encircling serpents (emblems of wisdom and eternity)—take any one of these, look at it carefully, and then deny if you can that Rodin was a great poet? Listen to Rodin himself:

"Man has had his part, an ephemeral part, in the creation. His idea strives with the works of God as Israel strove with the angel. His illuminating thought, expressed in stone, arouses those who would otherwise be insensible to beauty. The hand of man, like the hand of God, can transform a soul and make it new.

"O Mystery, in which I have lived, I understand you now that I am about to depart! The marvel of it all! And to think that one must leave it!

"Are not the thoughts of God expressed all the world over? Are they not the fruitful germs now growing within a brain, now in a beautiful grouping of stone, now captured by those magicians, the poets? And the sculptors, are they not poets, too?"

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COURTESY OF THE CENTURY CO., N. Y.

RODIN'S STUDIO, MEUDON, FRANCE

"Man disregards that which he already has and longs for something else. He longs for swiftness,—to 'have wings like a bird.' He does not know that he already enjoys this pleasure of moving through space. He rejoices in it in his soul, which takes wing and goes where it pleases, through the sky, on the waters, to the depths of the forests."—*Auguste Rodin*.

THE Parisian home of Rodin was the Hôtel Biron (bee-rong), now a museum for Rodin's works. It is situated in the old Quartier des Invalides (kar-tee-ay daze in-val-eed), and was the residence of the Duc de Biron in the eighteenth century. In the nineteenth century it was transformed into a religious school, or convent, where the daughters of the aristocracy were educated. The house was about to be torn down, when Rodin interposed and saved it. The Hôtel Biron stands at the end of the rue de Varenne, in the Faubourg St. Germain, a very aristocratic portion of Paris, full of handsome old mansions belonging to families associated with the history of France.

The Hôtel Biron is large, simple, and built on the lines of an elongated square. Its great charm is due to its fine proportions and to the grace and variety of its tall windows—some straight, some rounded, and some surmounted by ornaments. The spacious vestibule is paved with black and white marble, and six strong columns support the ceiling. There is a stone staircase. All is in the style of Louis XV. The northern side of the Hôtel, which passers-by see, is rather severe, and half-hidden behind the tall convent wall; the other side, facing the terrace and garden, is meant for friends, and is gayer in feeling. It is decorated with delightful stone ornamentation, and graceful windows with semicircular transoms.

Let us follow a friendly guide, who says: "To ring the bell one must reach high. The door swings open slowly. It is a portal that a coach could pass through! I knock at the door of the studio, and pass through two large rooms containing no furniture, only busts of bronze and groups of marble. When I enter this studio, Rodin is not here; I glance about. All the details of this room are familiar to me, but they always seem new, because everything is in harmony here.

"It is a lovely spring morning. The bright light falls on the various antiquities that Rodin has collected: Empire chairs with faded velvet coverings; and a Louis XIV arm-chair of gilded wood and cherry-colored silk, in which one might fancy Molière seating himself to chat with Rodin.

"On a round table there is a rich Persian material, and here stand several Japanese vases that are filled with tulips and anemones. On the mantelpiece are some Oriental bronzes and a blue and white porcelain statuette that Rodin calls his 'Chinese Virgin.' On the walls hang many of Rodin's water-colors. On pedestals, here and there, huge bronze busts call to mind warriors of the Middle Ages, and there are also many unfinished groups of white marble that look as soft as snow in the golden sunlight.

"On this table, where Rodin takes his meals and writes, is also a Greek marble—a little torso, without arms or legs. It is his latest passion.

"I enter the garden, where Rodin is enjoying a moment of rest. Owing to his habits as a good workman, he rises at five o'clock every morning.

"I pass through one of the big doors, opening into the park. The beautiful view always captivates me anew. The light, the air, the expanse of sky, the groups of magnificent trees, this rustic solitude in the heart of Paris, take me by surprise and inspire and elevate my spirit. Rodin is here, smiling and in good humor.

"We stand on the terrace overlooking the slanting expanse of green lawn. Below extends a broad walk, almost an avenue, carpeted with grass and moss, and losing itself in the distant wood. Fruit-trees make lovely screens on both sides of this walk.

"The grandeur of this park is due largely to the age of the trees. When I step to the balustrade of the terrace I see on the right the golden dome of the Invalides standing out alone against the sky.

"'Let us go to work,' says Rodin, and we return to the room of the statues. Rodin begins to draw. In a little while he will model. During his hasty luncheon he has the little Greek torso placed before him, and he makes notes all the while."

Rodin's other home was a charming villa at Meudon, a suburb of Paris, in the Valley of the Marne. Here Rodin relaxed and enjoyed his friends. The garden at Meudon was famous, for here the great sculptor placed rare and antique sculpture among the trees and arbors and on the knolls and open lawns with such an extraordinary appreciation of the effect of the changing light upon them that the result was poetic charm. Many visitors sought admittance.

After the battle of the Marne, Rodin returned to Meudon and took up his work again. Here he died, while awaiting the dawn of peace, which he was not destined to see.

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THE ADIEU. By Rodin

"Comprehension is like a divine ladder. Only he who has reached the top rounds has a view of the world."—*Auguste Rodin.*

AUGUSTE RODIN was a deep thinker. Great ideas inspired his chisel, which he often dropped for the pen. He grasped the principles of the fine sculptors of Greece and of the Renaissance, and he penetrated the secrets of nature. His mind was both analytical and contemplative. He read the works of the greatest thinkers of all ages—Homer, Dante, Shakespeare, and refreshed and invigorated by such sources of strength, he produced masterpiece after masterpiece. Rodin regarded himself as an outcome of the national strength—a part of the French nation, one in whom the soul of the race lived to put forth artistic principles and to teach a lesson in tenacity of purpose and in the value of unremitting labor. "My principles," he said, "are the laws of experience."

"We must listen to Rodin," an admirer writes, "as we would listen to Michelangelo or Rembrandt if they were living. For his method may be the starting point of an artistic renaissance in Europe, perhaps, indeed, throughout the artistic world."

We may find his message in his writings on art and nature, "Gothic Cathedrals," "Flowers," and in his "Note-Books"; for in words, as well as in stone, the poet, the artist, the thinker speaks.

"Art alone gives happiness," Rodin once remarked. "And I call Art the study of nature, the perpetual communion with her through the spirit of analysis." Again he says; "words are nothing; the deed alone counts. It is not by reading manuals on aesthetics, but by leaning on nature herself, that the artist discovers and expresses beauty."

Again; "what is beautiful in a landscape and in architecture as well, is air—space. Nobody today realizes the power of *depth.* It is this quality of depth that carries the soul where it wishes to go."

The depths of the firmament, the quivering light, fleeting shadows, undulating lights, form and luminous glories of color in sky and cloud and flowers gave Rodin intense delight, and, with mind inspired by these noble joys, the trained hand of the great sculptor was enabled to create a peculiar seductive vapor and flow and luminous quality that no other sculptor, ancient or modern, had ever thought of doing. Not only do beautiful gleams appear on the human body, but there is often a mysterious lightness in the unfinished parts of the block from which the figure issues, or is half revealed, that suggests tossing foam, or a bank of snow. This is new and strange in sculpture.

Read the description of sunset in the garden of the Hôtel Biron, and learn how the sculptor loved color: "The hour passes quickly, but it could not be better employed than in absorbing these marvels. As the sun drops behind the horizon with its glowing color, like the flaming fires of a forge, our hearts are full of wonder and awe. It gilds all in a last golden glory of triumph. There, where the sun has now disappeared, the sky has become orange. Everything is fading—another immensity spreads out before us: the glory of night is about to throw its melancholy charm over the firmament.

"I am overwhelmed by the fluid that we call life. I am in touch with life. What more can I want? This tenderness, which surrounds me everywhere, this ever-varying nature which says so much to me, this atmosphere which envelops me—am I already in heaven, or am I a poet?"

Such a mental force was bound to be recognized. Even before Rodin's death, a compatriot wrote:

"We ought to love in Rodin this intellectual vigor that skirts the borders of the impossible. In courage it is an inspiration, a source of restfulness and a point from which we can start out afresh, fortified and charged with vitality, to the conquest of knowledge or to the realization of our own talents. Rodin's refreshing and inspiring mind partly accounts for the tremendous influence that the illustrious sculptor has exercised over the minds of artists for thirty years. We feel that the fount of strength condensed in his virile soul comes from something deeper than his personality alone; it comes from the very depths of the national strength. The convictions, the determination and the energy of Rodin are those of the workman who knows his trade, of the laborer who is impassioned by the culture of his own soil. This endurance is the foundation of the French temperament. The present events of the war have proved what this temperament is. When a country possesses such individualities through the course of history, the roads of the future open out before it brilliant with hope, notwithstanding passing shadows, and promise the greatest surprises."

Rodin was truly one of those mighty geniuses that walk alone—of the race of the gods, a dweller on Olympus!

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BUST OF COUNTESS OF W. BY RODIN

"No man has a heart pure enough to interpret the freshness of flowers. We cannot give expression to this freshness: it is beyond us. When it sheds its petals the flower seems to disrobe and go to sleep in the earth. This is its last act of grace, showing its submission to God."—*Auguste Rodin.*

THE principles of art were first pointed out to me," said Rodin, "not by a celebrated sculptor or by a teacher of authority, but by a fellow-workman, an humble artisan, a little plasterer from the neighborhood of Blois (blwah). His name was Constant Simon (see'-mong). We worked together at a decorator's. I was at the beginning of my career, earning six francs a day. Our models were leaves and flowers which we picked in the garden. I was carving a capital when Constant Simon said to me: 'You don't go about that correctly. You make all your leaves flat-wise. Turn them, on the contrary, with the tips facing you. Execute them in *depth* and not in *relief*. Always work in that manner, so that *a surface will never seem other than the termination of a mass.* Only thus can you achieve success in sculpture.' I understood at once. Since then I have discovered other things; but that rule has remained my absolute basis. Constant Simon was only an obscure workman, but he possessed the principles and a little of the genius of the great ornamentists who worked at the *Château* on the Loire (lwahr). On the St. Michel (sang mee-shell) fountain in Paris there are very beautifully carved decorations, rich and graceful, made by the hands of this little modeler who knew much more than the professors of art."

Here, then, is one of Rodin's theories—the *modeling* in depth instead of in the *flat*, producing the great effect of depression and projection and the roundness of form. Then we must note Rodin's great sense of proportion; then, his instinctive feeling for a beautiful *undulating* line, which he studied and sought for all his life in the works of antiquity and in nature's handiwork; then, his knowledge of perfect *balance* and the laws of motion, resulting in what he himself calls "the charm of balance"; then comes his marvelous drawing; then his knowledge of planes, through which the great oppositions of light and shadow are obtained; and then his great feeling for *light* and his knowledge of how to make light an aid in producing the effect he desired in his compositions.

On these points Rodin pondered all his life, and with observations on these points his note-books and writings are filled. For instance, Rodin exclaims: "What is modeling? The very principle of creation. It is the juxtaposition of the innumerable reliefs and depressions that constitute every fragment of matter, inert or animated. Modeling creates the supple living flesh. It produces everything, it animates everything, the *depth* as well as the *surface*. Modeling takes in the minute as well as the great. Mountain, horse, flower, woman and insect owe their form to modeling. When God created the world, he must have thought of modeling first of all. When you examine a hand you notice its contour and then the character of the whole. The eye of the artist sees more: it notes the infinite assemblage of projections and depressions forming a composition more closely knit and more wonderfully blended than the most perfect mosaic. If the artist is a sculptor, he tries to render this by the science of depression and relief; if he is a draughtsman or painter, by the science of light and shadow. For light plays in its union with depressions and relief the same part as the painter's brush. Titian (tish'-an) is as great a modeler as Donatello.

"Today the feeling for the round relief is completely lost. It is the age of the *flat*. Men love what they do themselves until they are made to see that it is not beautiful; but it takes years and years for this to reach their consciousness. In our own time the pest of flatness has contaminated the Asiatic races as well as the European; the decadence is universal.

"We are so far removed from antique beauty that when we copy the works of the ancients we take them in the spirit of our own taste, which is that of low-relief. We take from them the beautiful modeling which is their richness, their crowning grace. When I say low-relief, I do not mean the term exactly, but there is no other way of expressing the modern evil of uniformity. Good low-relief is as full and fruit-like as sculpture in the round, and it often is—as in the friezes of the Parthenon and our buildings of the Renaissance and of the seventeenth century—sculpture in the round itself.

"The great struggle of my life has been to escape from the general flatness. All the success of my sculpture comes from the fact that the public is tired to death of this everlasting flatness. The charm of the round is so great that it captivates even the ignorant without their knowing it."

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LA PENSÉE (CONTEMPLATION.) BY RODIN

rich in teaching of many kinds, and very precious to the world in its wonderful results.

Like every other truly original artist, Rodin was at first misunderstood; and, indeed, it was with difficulty that a few enthusiasts discovered in his first attempts that undefinable charm which became definite only at a later period, after this daring innovator's perseverance had triumphed over the ostracism of which he had so long been a victim.

Early Years

Born of a simple family and without fortune, young Rodin was compelled at an early age to make a place for himself. He entered the *École des Arts Décoratifs* (School of Decorative Arts), in Paris, where his taste for drawing asserted itself. Then it was that he began that long and obstinate study which nothing ever interrupted and which finally led him to success.

When he was about seventeen, believing himself ripe for the *École des Beaux Arts* (School of Fine Arts), he presented himself at the *concours* (contest); but he was pitilessly refused because "he did not know how to draw." Three times he repeated his attempt and three times he was rejected. These successive checks would have discouraged any one less well-tempered; but Rodin persevered and conquered, for he felt himself impelled by an invincible force.

In his rare moments of leisure, Rodin began to work for himself and to prepare a piece for the *Salon*. This was the "Man with the Broken Nose," considered a perfect masterpiece today. We are now, however, in 1864, and Rodin is but twenty-four. When the members of the jury came to examine the work of the *débutant*, all were stupefied: What could that "horror" mean that was submitted to their sober judgment? Was some one making fun of them? What did the common face, disfigured by a deformity, mean? Evidently a joke! They must refuse, and without further examination, such an aberration, and, moreover, give a severe lesson to the dangerous lunatic.

Rodin was not in the least disturbed over his rebuff; he knew he had only to wait a little.

When Rodin reappeared at the *Salon* it was with another master-

RODIN'S HOUSE AND STUDIO AT MEUDON, FRANCE

RODIN'S HOME, HÔTEL BIRON, PARIS, FRANCE

RODIN AT WORK

piece—"The Age of Bronze," a bold and magnificent conception which astonished his detractors and won the admiration of *connoisseurs;* for those high personal qualities of Rodin, already revealed in the "Man with the Broken Nose," were manifested in this new creation and in a manner so intense that it was impossible ever again to challenge the genius of this master.

Some critics carefully insinuated that the artist had manifestly taken a cast of this subject, because he could not have given it such vitality by any other means. This perfidy was spread far and wide and occasioned interminable discussions, which, far from harming Rodin's reputation, on the contrary, called attention to his great creative power.

Now, everybody was compelled to make a choice—there was no alternative—"are you *for*, or *against*, the art of Rodin?" The question accounts for the turmoil that was produced by each new production.

The artist himself remained calm in the midst of all the noise: undisturbed, he continued to study Nature and to reproduce her in all her truth and splendor.

The Art of Rodin

PORTRAIT BUST OF RODIN
By the sculptor Soubinine

Those that try to analyze the genius of Rodin often take a wrong road because they make comparisons and bring the style of his work into relation with the styles of other masters who are known and classified. This mistake is frequently made; but it may easily be avoided if we remember that the art of Rodin is essentially original and personal and does not lend itself to any comparisons whatsoever. It is more logical, and much more profitable, to content ourselves with an examination of the constructive elements of his genius.

What strikes us at first when we examine a work by Rodin, such as "The Thinker," for example, is the *movement* which determines the intense life of the personage. We get the impression that the artist has, first of all, wished to establish a communion of existence between the spectator and the subject, so as to force the interest of the former upon the latter. This movement is obtained by the high qualities of the master's drawing—qualities that are found in all the great exponents of sculpture and painting, such as Michelangelo, Raphael, and Titian (tish′-an), for example, and also in the sculpture of Greece.

The second characteristic that unfolds itself is that of a masterly thought which the artist has conceived and which he has wished to express in an attitude, a gesture, a physiognomy, or, sometimes, in a simple glance. His "Dalou," his "Victor Hugo" and his "Balzac" show this characteristic in luminous fashion, as do, in fact, all the conceptions of his brain. This dominant trait is so judiciously expressed that the intelligence of the spectator perceives it without any effort: it seems to penetrate into him as soon as the work appears before his eyes, and to become stronger and stronger, in proportion as his gaze remains fixed. We should remark that, in order to obtain this striking effect, Rodin had recourse, as a general rule, to no attribute, or accessory, that might aid the spectator's judgment. He seems to have considered everything apart from the one dominant idea of his subject as trickery.

In the Luxembourg Gallery
MAN WITH THE BROKEN NOSE

When we examine "The Burghers of Calais," the "Gate of Hell," "The Tempest" and "Bellona"—and, indeed, all of his characteristic works—we cannot find that Rodin felt

any concern about enlightening our beliefs, other than by the intensity of the expression, that sublime product of his fertile imagination, and by his prodigious talent for composition. Rodin considered himself to have a religious nature, and took the ground that all artists are temperamentally religious.

If, on the one hand, Rodin seems to care so little for pleasing the masses, and if his art is addressed only to those who seem to him worthy to understand it and who can enter into his views, on the other hand he is of that race of great imitators who count upon time to educate the ignorant, and who rest content if they are not wholly misunderstood, and if they can gain the approbation of a few highly cultured persons, waiting for the time when their genius will compel general admiration.

In the Luxembourg Gallery
THE AGE OF BRONZE
Depicting Man awakening to Nature

Rodin's Temperament

To appreciate thoroughly the third element of Rodin's aestheticism, it is well to understand the temperament of the Master, which was composed of tenderness and sensibility mingled with passion, fire and sensuality,—all valuable and precious things in art; for the artist naturally impresses upon his works the manifestations of his temperament. The works of artists who do not possess these elements are cold and dry.

Rodin expresses very marvelously the voluptuous sensibility of Love, to which he adds the supple grace of the body, the lines of which he studied with passion. He kept in his most ardent expressions a chaste reserve, which the dignity of his art demanded; but the one idea that never abandoned him —that of giving life to his personages above all else—led him naturally to an alluring realism which produces a happy contrast with the wild energy of the greater number of his other works. "The Kiss," "The Muse and the Poet," "The Female Faun," "Romeo and Juliet" and "The Eternal Idol" are exquisite pieces in this class of ideas. We must also draw attention to that delicate idea of the "Young Mother," to "Brother and Sister," to "Adolescence," to "The Poet and the Muses," and several others.

HEAD OF THE AGE OF BRONZE

The Part That Light Plays

This last characteristic is one of the most powerful elements of Rodin's expres-

sive force—*it is the part that light has in his works*. Rodin is among those artists who have best understood the *rôle* that light plays in the plastic arts. In this respect he may be compared to Rembrandt; the methods of these two great geniuses are very much the same.

STATUE OF VICTOR HUGO

Who does not recall the criticism addressed to Rembrandt upon his habit of directing a luminous ray upon a certain point of his picture, so that the attention of the spectator was concentrated on the essential part of the subject at the expense of the rest of the composition, which the artist seemed to disdain? The same criticisms were directed against Rodin a hundred times over!

Why, critics asked, give so much care to a certain part of a subject, and leave the rest in the condition of a sketch? Why, above all, did Rodin not bring his subject out of the stone, preferring to show, most frequently, only one side of a person in *demi-relief*—indeed, almost in *bas-relief*? Why, finally, leave the statue in a brutal state, with a great part of the block uncompleted?

Rodin never took the trouble to reply to these remarks, which he considered as idle and vain. He contented himself with proclaiming a truth which was dear to him—"*Le fini tue la vitalité*" ("Finish kills vitality").

HEAD OF THE BALZAC STATUE

And, indeed, this principle is confirmed in a number of works of art, and, particularly, in architectural decoration. Did not Hourticq wisely say: "It is not sufficient to admire architecture, nor even to understand it well in order to resuscitate it. The Gothic *pastiches* (imitations), that have succeeded the best, are of an extreme coldness. The modern builder brings to his task classical habits, uniformity of plan, symmetry, and neatness of design; as well as rigorous regularity, which determines the form of the edifice in all its details and division of labor, which makes of the architect a mere designer on paper and of the workman a mere stonecutter. In old

STATUE OF BALZAC

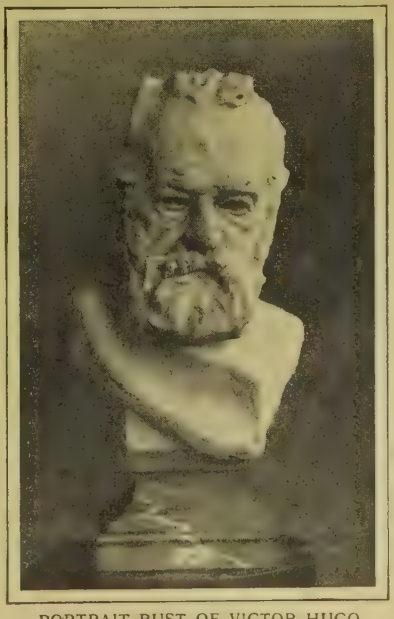
This extraordinary work created a storm of criticism, some critics pronouncing it a grotesque caricature and an insult to Art and to Balzac

cathedrals the *stone sculpture* lives everywhere: the work is varied, rich, and surprising. Modern copies are constrained: the dry geometry of our architects cannot regain the soul of the Gothic cathedrals."

This wandering soul Rodin found again: his "Burghers of Calais" and his "Gate of Hell" reveal it in its entirety.

To conventional finish, which Rodin rejected with much energy, he opposed his remarkable exploitation of light, which he employed for two ends. The first was to attract the eye of the spectator towards the essential point of the subject,—a point treated with passion, where his thought was concentrated with all the power of his chisel. Why should he need to explain and finish the other parts of the block when the poem of the stone was achieved, when there remained nothing more to express in his chosen theme? To work more upon the visible field would be to spoil the spirit of condensation which is the very essence of Rodin's genius.

Secondly, light plays a preponderant part in the work of Rodin; and light contributes splendidly to the realization of a favorite expression of his: "*La vie avant tout*" ("Life before everything"). We may cite at hazard any work of Rodin, as we may cite at hazard any work of Rembrandt, and find this genial trait everywhere, and in the same degree.



PORTRAIT BUST OF VICTOR HUGO

Rodin's Writings

After having considered the characteristics of Rodin's genius, it is appropriate to speak of his writings, which so well reflect his majestic personality.

Poet superb, powerful interpreter of nature, which he penetrated with such an incomparable mastery, Rodin owed it to himself to translate his ideas and his aesthetic principles into writing. Little prepared at first for the *rôle* of writer, he soon initiated himself into the resourcefulness of the pen. In the midst of his inces-

sant labor, interrupted only by the evening, during which he feverishly awaited the return of the fructifying light, he filled many of these somber hours by writing of that art which claimed his attention without intermission.

"The Cathedral" preserves in a concrete manner the ideas expressed hundreds of times by this inspired poet in stone. There we find again, under forms of ingenious images, original "figures of speech" and happy comparisons, those sublime principles upon which all the art of Rodin rests. The vigorous and rapid sketches that accompany these reflections of the master complete his demonstrations marvelously.

PORTRAIT OF A YOUNG GIRL
A work of Rodin's youth

The language that Rodin writes is most seductive. We always feel the sensibility of the poet and the lover, and his unreserved admiration for the great classics of Greece—"that land of sculpture, the only one without alloy."

Rodin's writings attest the abundance of his thought, the fertility of his imagination, and his profound knowledge of all the elements of art. They breathe the enthusiasm and the belief in ideal beauty that sustained the artist during his hard career and that procured for him the purest pleasures.

His Career Crowned

If we wish to draw certain conclusions from the laborious career of Rodin, and from the stupendous renown that this great artist acquired, we might say that no one better than Rodin exhibits the evolution of a genius, that, ignorant of itself at first, gradually became conscious of its force and developed itself through all the vicissitudes of life, and despite all obstacles. Rodin experienced the saddest hours of artist life, as he experienced its most brilliant triumphs. Before installing himself in that charming Villa de Meudon, where he now reposes forever, this indefatigable fighter knew the hardest struggles—like a soldier who is arrested by no danger and who sees only the final victory. Rodin possessed within himself a flame of genius that, sustained

REPRESENTATION OF FRANCE
In the Monument to Champlain. Photographed in Rodin's Studio

PORTRAIT OF MADAME MORLA VICUNHA

by an unalterable tenacity, kept up his enthusiasm, and led on to success.

Alone, poor, and hampered by the material needs of life, his one dream was to acquire such technical knowledge as was necessary to bring out, in their full value, the treasures of art that he felt were within himself. Far from being discouraged by his first rebuffs, he drew from them a new strength that fortified him ever more and more and conducted him slowly but surely forward.

Once in the light of fame, his personality declared itself, uncontested. The world gave him adulation and offered him incense, as if, indeed, repentant of having once misunderstood him. His most bitter adversaries capitulated and sought his friendship, and those that had hesitated about accepting his theories became his warmest partisans.

Before this revolution of opinion, which had been effected by his creative power alone, Rodin remained calm, not because he wished to show disdain for his legitimate triumph, but because his artistic nature, absorbed by ideals and solicitous before all else to accomplish his work, had no other ambition than the satisfaction of having, so to speak, carved stone to his implacable will.

Rewarded by universal popularity, honored by the nation in a magnificent manner, Rodin enjoyed full glory during the last twenty years of his life. Like Voltaire, he assisted at his own living apotheosis. His colossal work, housed in great part in the delightful Hôtel Biron, now become a *Musée d'Etat* (National Museum), has definitely consecrated his fame: he is celebrated forever, without dispute.

PERISTYLE OF THE STUDIO AT MEUDON

Rodin's Influence

What will be the influence of Rodin upon the art of the future? Will he found a school? His method —will it be taught? Questions difficult to answer.

We think that the very personal

art of Rodin will not permit of imitation. Already several young workers have tried to imitate it and their attempts have not been happy. Imitation goes beyond the original, and accents imperfections far more frequently than it concerns itself with the fine qualities. The personality of a true artist comes from his own genius and cannot be transmitted. It would be better, we think, if the disciple tried to create for himself, at the side of his master, instead of endeavoring to wear his master's sandals.

THE VILLAGE FIANCÉE

Do we, therefore, mean to say that nothing is to be taken from the heritage of an innovator? Certainly not. The point is to discern intelligently what may be profitable to art, and to avoid all that would be mere servile imitation.

Considering him whom people will call in the future "*le grand Rodin*" (the great Rodin), many elements of his genius will be profitable for the generations of artists that are to succeed him, from the point of view of art in general and the technic of sculpture in particular:

1. His dominating idea to give *life* to his subjects.

2. His imperious desire to express a masterly thought without recourse to accessories that would only weaken his creative power.

3. His wish to impress the spectator by the attitude and the sense of movement.

PORTRAIT BUST OF BERNARD SHAW

4. His facility in creating, turn by turn, strength, energy, grace and delicacy, and to render, with an equal mastery, the entire scale of human sentiment, from terror and anger to tenderness and voluptuousness.

5. A prodigious knowledge of composition due to an ardent imagination always at work.

6. His skilfulness as a draughtsman, which, with the examples before him of the great geniuses of antiquity and of the Renaissance, enabled him to realize his mighty conceptions.

These many faculties, united in a single brain, made of the artist that possessed them one of the greatest figures in art. It is no exaggeration to characterize Rodin as one of the supreme geniuses in whom France takes pride.

ÉMILE VILLEMIN

Rodin's Art Personality

Rodin had so impressed his personality upon the imagination of his contemporaries that, if all his works had been destroyed, he would still have left a deep mark upon the period. The idea may be expressed in another way by comparing him with Tolstoy. Each was a personage and stood for a type and an attitude toward life. Tolstoy distrusted beauty and taught repression of the natural impulses. Rodin worshiped nature, finding no evil therein; and to him, free utterance was of the essence of life and art.

In his later phase, the great sculptor had been identified by many only with certain daring modern tendencies, away from actual representation in art. Too often it has been overlooked that he never gave up his allegiance to ancient Greece. He began his artistic life by a severe apprenticeship in carving the humbler kinds of architectural ornaments. In such work as the much discussed "Balzac" he carried modification a long way, but undoubtedly the forms of nature were always at the basis of everything in his own mind.

ADOLESCENCE
An exquisitely poetic expression of the beauty of childhood

It is fortunate that Rodin's collection of his own works and of the antiques he had acquired was given to France by the sculptor before his death. When a petty argument arose in the Chamber of Deputies over the acceptance of the gift, one of the speakers that favored it remarked that it would be absurd for his own nation to refuse his works when the United States had a "Rodin Gallery" in the Metropolitan Museum of Art.

An American, George Hellman, was one of the first to call attention to the interest of the sculptor's drawings. American painters and photographers have made some of the best portraits of the man. He undoubtedly formed one of the intellectual and artistic ties between the French and American nations.

SUPPLEMENTARY READING

RODIN, THE MAN AND HIS ART. With Leaves from his "Note-Books." Compiled by Judith Cladel, and translated by S. K. Star. With Introduction by James Huneker, and illustrated with many photographs.

THE OPEN LETTER

In a letter in the day's mail I find the question, "What is meant by Individuality in Art?" In the present number of The Mentor the answer to the question may be found. Rodin was the living embodiment of individualism. "Individuality in Art" is the same as individuality in everything else. It is the quality or qualities that make a man singular, and distinct from his fellow men. If we accept that definition, however, in its widest meaning, an insane man or a fanatic is an individualist. So he is. But he does not engage our sympathetic interest, or our support—only our pity. The recognition, acceptance and appreciation of one's fellow men establish and canonize one's individuality. Without the acceptance and appreciation of the world, the qualities that make individualism go into nature's discard.

★ ★ ★

In art, individualism means a distinct point of view and manner of expressing one's self. "In this age of individualism," says Professor John C. Van Dyke, "almost every artist originates a style of his own, and the correctness or incorrectness of it is very much dependent upon whether it pleases or not." When we use the word "style" we mean that which, in a large sense, shows the character and particular "mental and moral bent" of the man behind the brush or chisel. For instance, there is the grand style of Michelangelo, the exalted, spiritual style of Raphael, the classic style of David (dah-veed), the poetic, pastoral style of Corot (kor-roe), and the vital style of Rodin's utterance in stone. In art, extremes in individuality are to be found, both to be appreciated and admired. Some painters spend weeks painting the texture of a dress; Goya, the Spaniard, did it, apparently, "in a second, with a single downward dash of the brush." Some work out a portrait with careful pains, so that every detail shall be in evidence: Rembrandt made the essential parts of a portrait live in brilliant flashes, and let the rest go. Many sculptors carve, and smooth, and "tickle" their surfaces to a fine, "finicky" finish: Rodin cut the vital part of his creation out of the marble, and left the rest of the stone, a mute appeal to our imagination.

★ ★ ★

If you would know what "Individualism in Art" is, judge every artist by his own particular methods, and look especially for the artist's meaning. Ask yourself: "What does art mean to him, what is his own individual message, and how has he expressed it?" Do not find fault with one artist because he has not expressed himself the way another might. Decide simply whether his idea is a fine one, worthy of art, and whether he has made it clear in a worthy style. Look for that quality in art which, as Professor Van Dyke says, "You will feel whether you will or no—the *individuality* of the artist. No two artists are precisely the same; some we like and some we dislike, and the reason is simply that their individuality is pleasing or displeasing to us. The individual is peculiarly constituted with certain faculties, powers, emotions, motives; and his thoughts, moods, deeds, expressions are modified by his peculiar make-up. In some cases these conditions make the eccentric man, in others the individual man. And somewhat of the man, whatsoever he may be, finds its way into his work and tinctures the whole. This is individuality, and when in art it is so strong that it commands us, it is sometimes called genius."

★ ★ ★

Rodin was a granite-ribbed mountain in the world of art. The critics of his time demanded that the mountain come to them and level his abrupt summits to the accepted planes of art topography. But this he would not do. He persisted in thrusting his rugged steeps to the sky till the world stood in wondering admiration. Then the critics, like Mahomet, finding that the mountain would not come to them, surrendered and went to the mountain.

W. D. Moffat

EDITOR

WILMER, BRITISH COLUMBIA, IN THE WINDERMERE VALLEY

THE STORY OF THE COLUMBIA RIVER

The Windermere Valley

ONE

THE snows of the Purcell Range feed the small lake in which the Columbia takes its rise. Some of the peaks that guard the lagoon-like channel,—Bruce, Farnham, Jumbo, Delphine,—have an altitude 11,000 feet above sea level. The valley itself is about 2,500 feet above the sea. Eastward is the mighty file of the Rockies.

Barricaded ever so staunchly, shielded from brusque winds, and abundantly watered by rills from glaciated summits and terraced foot ranges, the vale known as the Windermere trench abounds in productive meadows, and boasts a peculiarly gentle mien. Adjoining Upper Columbia Lake is the long and sinuous waterway called Windermere Lake. At its north end the Columbia takes form as a river, and begins its stately career between verdant shores that offer strange contrast to the rugged heights which survey ranch and orchard. Gracious sites are occupied by villages, mostly peopled by settlers invited to this new-plotted Eden by agents of Government and railroad. Well up on the slopes of the Purcell Mountains are busy mining camps, and trails that lead to rocky retreats which afford big game hunting.

Transportation through the valley is by a comparatively new railway 166 miles long, which connects the main line of the Canadian Pacific with the Crow's Nest Route. The latter crosses southern Alberta and British Columbia. From stations on the Crow's Nest line subsidiary railroads run into Idaho and Montana. An excellent highway, built by the Government, also passes the length of the valley, and a new motor-road traverses the Rockies from Windermere to Banff.

An extraordinary relationship exists between the Columbia and the Kootenay, also a stream of international importance. It has its source among the foothills of the Rockies. Flowing south, it enters the valley at a point not more than a mile from Columbia Lake. Continuing on its way it crosses the boundary at Gateway, Montana, makes a great loop, re-enters British Columbia below Kootenay Landing, widens into Kootenay Lake, then bends westward. Beyond Nelson, at the foot of the Arrow Lakes, it casts in its lot with the river which paralleled it in its infancy, and, merged with the Columbia, crosses for the third time the bounds of the United States. Geologists believe these rivers with neighboring sources, but of widely divergent courses until their union, were once joined in their mother valley, previous to a change in the earth's slant.

Historic interest in the Columbia Valley centers in the grass-grown trench of Upper Kootenay House, built on the banks of Lake Windermere by David Thompson, first explorer of the river from source to sea.

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THE OLD TRADING POST AT ASTORIA, OREGON

THE STORY OF THE COLUMBIA RIVER

The Founding of Astoria; First Settlement of Americans on the Pacific Coast

TWO

"TWO leading objects of gain," in the words of Washington Irving, "gave birth to wide and daring enterprise in the early history of the Americans,—the precious metals of the south, and the rich peltries (fur skins) of the north. . . . These two pursuits have . . . been the pioneers and precursors of civilization. Without pausing on the borders they have penetrated at once, in defiance of difficulties and dangers, to the heart of savage countries: laying open the secrets of the wilderness; leading the way to remote regions of beauty and fertility that might have remained unexplored for ages, and beckoning after them the slow and pausing steps of agriculture and civilization." It was the fur trade "which gave early sustenance and vitality to the great Canadian provinces," which inspired the organization of the Hudson Bay Company in 1670, and the "Northwesters" of Montreal a century later. The success of the English and Canadian traders in bartering with Indian trappers, and in establishing stockaded posts far and wide throughout the great wilderness of the Northwest, aroused both the American Government and enterprising individuals to similar efforts, with ultimate territorial control quite as much in view as immediate financial gain. An adopted citizen of the United States, a German born in the Rhenish village of Waldorf, fathered the first American settlement on the Pacific coast.

In 1784, John Jacob Astor, a youth with mature commercial vision, arrived in this country and almost immediately engaged in the fur traffic between New York, Montreal and London. On the return of Lewis and Clark from their expedition to the Pacific, he evolved a plan to establish a line of trading-posts "along the Missouri and the Columbia, to the mouth of the latter, where was to be founded the chief trading-post, or mart. Coasting craft would be built and fitted out, also, at the mouth of the Columbia to trade at favorable seasons all along the northwest coast, and return with the proceeds of their voyages to this place of deposit. Thus all the Indian trade, both of the interior and the coast, would converge to this point, and thence derive its sustenance."

Astor incorporated a company, of which he was the chief stock-holder, and in 1810 an expedition by land and one by sea set out for the Columbia's mouth, where trade was to be carried on under the name of the Pacific Fur Company. The ship *Tonquin*, "of two hundred and ninety tons burden, mounting ten guns, with a crew of twenty men," carried four of Mr. Astor's partners. The voyage of the *Tonquin* and the founding of Astoria are described with absorbing detail by Gabriel Franchère, a young man from Montreal who joined the ship's company as a clerk. At the request of Mr. Astor, his good friend Washington Irving also wrote the history of the Astoria enterprise, including accounts of hazardous expeditions made far inland.

Having set out from New York in September, it was the following April (1811) when the *Tonquin* sighted "the confused and agitated sea" at the Columbia's bar. A place was chosen on the south bank, about a dozen miles from the entrance, for the building of the post. Two years passed, years of distress and anxiety which culminated in disaster at the outbreak of America's war with England, in 1812. The *Tonquin* was tragically lost in the harbor of Nootka. The settlement and stocks of pelts were bought by the Northwest Company, and the new owners named the stronghold Fort George. In 1818, at the return of peace, the Americans once more took possession and re-christened the place Astoria. The British were, however, in such complete domination of trade in the Oregon Country that Astor's attempts to pursue his first aims were fruitless. A provisional treaty calling for the territory's joint occupancy by Americans and British was signed, and endured until 1846, when the Columbia as far north as the 49th parallel became indisputably an American possession.

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THE COLUMBIA GORGE AND CROWN POINT

THE STORY OF THE COLUMBIA RIVER

The River as a Highway

THREE

AS the report of Captain Cook's voyages influenced the initial attempt of Americans to trade in Northwest fur skins, and led to the discovery of the Columbia by Captain Gray in 1792, so it was one of Cook's associates, John Ledyard, who first aroused the interest of Thomas Jefferson in the magic realm beyond the Rockies. Jefferson inspired the expedition of Lewis and Clark, the first men of their race to travel the river highway from its junction with the Lewis or Snake River to the sea. The object of the expedition (1804-1806) was to discover what water routes offered to the United States the greatest commercial advantages.

The journals of the indefatigable young adventurers give us the first impressions of the Columbia as seen by white men, and acquaint us with its cascades, islands and rock landmarks. The party traveled the river for 649 miles in canoes, camping on the shores, where Indians lived in great numbers. With "much dificulty" their canoes were dragged around rapids beside which rails and concrete locks now afford convenient transportation. Clark refers to fifty-two canoes on the bank in front of an Indian village, "many of them very large and raised in bow." Frequent mention is made in the daily chronicle of native craft loaded with pounded fish for the trade down-river, and of traffic in wapatoo roots, dogs, and other edible commodities that were transported in dugouts. The company reached the mouth of the Columbia, wintered on Clatsop Meadows, south of the estuary, and returning east in the spring of 1806, were acclaimed heroes of a sensational and most profitable journey, which had established the value of the Columbia and its tributaries as commercial thoroughfares.

The next important band of adventurers to employ the Columbia as a highway was the land division of the Astor expedition, led by Wilson Price Hunt. Subsequent years witnessed the incoming of hardy trappers and traders under the flag of the Hudson Bay Company, which in 1821 was united with the "Northwesters," the better to combat Yankee inroads. Fort Vancouver on the Columbia was the port of *bateau* and sailing-ship. Fur brigades came from the distant north, and at the picturesque post on the slope opposite the Willamette's mouth, skins were exchanged for supplies brought hither by vessels from the St. Lawrence and the Thames. Upwards of fifty men often manned the boats of the rollicking *voyageurs*, many of them swarthy French-Canadians.

Dr. John McLoughlin, governor of all the Hudson Bay Company's stations west of the Divide, had his seat at Fort Vancouver. There, risking the displeasure of his superiors in London, he welcomed and mercifully succored the wearied immigrants who, following in the van of pioneer American traders and missionaries, came over the Oregon Trail from the United States and braved the broad waters of the Columbia. In 1843, coincident with the memorable pilgrimage of Dr. Marcus Whitman from Walla Walla to Washington, a considerable company of settlers crossed plain and mountain to Old Oregon. Influenced by their favorable reports of the benign valley of the Willamette, several thousand newcomers crossed the Rockies and journeyed down the Great Highway on flatboats or log-rafts, some of which were built to accommodate a prairie schooner and its occupants.

River steamboats first navigated the Columbia nearly half a century after the palisades of the Hudson first echoed to the labored exhaust of the *Claremont*. Passengers and cargo were carried five miles around the cascades on a crude railroad, and fourteen miles from The Dalles to Celilo Falls. The rails of the first "portage road" were of wood, and a mule furnished the motive power. Extravagant tales are related concerning the earnings of these primitive agencies of transport during the invasion of the Inland Empire in the sixties and seventies by miners and settlers who came up the Columbia from far-away ports.

As a highway the importance of the river has been vastly increased by the recent completion of the Celilo Locks. Seaward from the harbor of Portland steam great ships carrying lumber, wheat, wool, fruit and fish garnered from the splendid domain of which the Columbia is mistress

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MULTNOMAH FALLS, ON THE OREGON SHORE

THE STORY OF THE COLUMBIA RIVER

Waterfalls and Rocks of the Columbia Gorge

FOUR

WHERE the Columbia breaks through the mountains it celebrates its victory by flinging foaming white banners on its southern wall, and rearing on both shores monuments of phenomenal shape. No more strangely beautiful passageway was ever contrived by Nature. Assembled in the gorgeous corridor are a dozen waterfalls, one of which has a total descent of 750 feet. Hurrying streams bring the melted snows of Mt. Hood's northern flank to the edge of the broken foothills, and there drop down ravine and precipice to the river. The face of the river walls is ruggedly composed, and towers, or bastions with tumbled outworks rise from its ledges. Often the rock is veiled in forest growth, or signal pillars wear a tapestry of emerald moss, rilled with running springs. Directly on the water-edge are crags of ruddy hue, with surface oddly chased, or cut in symmetrical slabs by the chisel of the ages.

At the east gate of the gorge on the Washington shore stands Castle Rock, a mountainous pile of basalt with a base area of seventeen acres. This is the perpendicular monolith described by Lewis and Clark as "Beacon Rock; insulated from the hills. The northern side has a partial growth ot fir or pine. To the south it rises in an unbroken precipice to the height of seven hundred feet, where it terminates in a sharp point, and may be seen at the distance of twenty miles below. This rock may be considered as the point where tide-water commences."

On the Oregon side the predominant outpost is St. Peter's Dome, with an elevation of two thousand feet above the water, and, perhaps, the most strikingly beautiful contour of all the river rocks. Two miles beyond, the Horsetail Falls spring with the arch of a thoroughbred's tail over the vivid green of a high cliff. A gorge within a gorge is that called Oneonta. This shadowy rift between granite walls confines a noisy creek which leaps successive precipices.

In contrast to the perpendicular gully is the wide recess which holds the master fall, Multnomah. Over a ledge nearly seven hundred feet high the stream plunges with an outward sweep that carries it free of the hillside and down to a resounding pool, screened at the sides by slanting evergreens. A second leap brings the cataract to the river-edge. In accessibility, height, and beauty of surroundings Multnomah excels all the waterfalls of the Northwest. A seven-mile trail from the highway climbs beside the fall and reaches the summit of Larch Mountain (4,000 feet), from which the river and all the peaks above it are disclosed. By rail or motor-road Portland is sixty miles distant from Multnomah.

Further down shore are other airy cascades, Wahkeena, Bridal Veil, Latourell, and lesser neighbors that fill forest alcoves with the music of their falling. Across the river defiles the remarkable battlement of Cape Horn, hewn in columns half-embedded in a long, high wall. The Pillars of Hercules, on the Oregon bank, further testify to the ingenuity of Nature, and Rooster Rock is still another example of her artistry. Fair of aspect as its name is deceiving and ungainly, the latter mounts guard amid a group of trees at the western portal of the canyon. Above it towers the massive cliff chosen as pedestal for the wide-viewing pavilion which keeps in memory the first American home-makers to settle in the Columbia Valley.

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THE COLUMBIA RIVER HIGHWAY, OREGON

THE STORY OF THE COLUMBIA RIVER

The Columbia River Highway

FIVE

FROM Astoria to The Dalles there runs on the Oregon side of the Columbia a road which has no equal in America. Every element of scenic grandeur contributes to beautify it, and ingenious engineers have shown what man can do to supplement the Creator's handiwork and overcome obstacles seemingly insurmountable. The godfather of good roads in Oregon, Samuel Hill, had for several years made the technique of highway construction his hobby. He toured Europe to investigate methods found most advantageous there, and on his estate he laid out sample stretches of roadway to demonstrate different kinds of bedding and enduring surface. Besides, he turned lecturer—though his business was telephone ownership, not road-making—and up and down the Northwest of America his voice was heard urging upon fellow citizens the advantages of well-laid highways. In 1912, the hopes and dreams of a few broad-minded Portland men culminated in a definite resolve to put in practice on the south bank of the Columbia's canyon some of Samuel Hill's ideas. Three years later, the Columbia River Highway was a reality. Barriers had been tunneled, cliffs carved out, bridges swung high, the river shore buttressed, to make the dream come true. Walls of concrete and stone guarded perilous curves. In places the road was laid on a steep fabric of dry masonry, constructed by Italians whose knowledge was a heritage from mountain forefathers.

The highway engineer was Samuel Lancaster, who writes: "A careful study of the great gorge of the Columbia revealed its wonderful beauty, and the great possibilities for a scenic and commercial highway. It was decided that the best modern practice should be followed in building a road suited to the times, the traffic, and the place. Such a road to have a minimum width of twenty-four feet, with extra width on all curves, and no radius less than one hundred feet. The maximum grade to be five per cent."

The first construction camp was set up at the base of Multnomah Falls in 1913. Citizens of Portland contributed woodland acres, and the Government dedicated to the people's use a wide expanse of mountainside and forest. The road-master was John B. Yeon, a man of large means, who gave his services for two years without pay. The financial backers of the enterprise were the Oregon counties which border the river for the last 200 miles of its course. In July, 1915, the road was thrown open to traffic between Portland and Hood River, and the following month construction was completed as far as Astoria and the Pacific beaches.

Says Mr. Lancaster, "Shell Rock Mountain, around whose base a road now runs on a blasted ledge, had always been regarded as an impassable barrier. No wagons were able to get by this mountain in pioneer days; the hardy homeseekers used to stop just east of this point to cut down trees and make their rafts of logs, on which they floated down the river to the Cascades. . . . The tunnel (400 feet long) in the face of the cliff at Mitchell Point, with the concrete viaduct approaches, may well be considered among the most wonderful pieces of highway construction in the civilized world. It is fully equal to the famous Axenstrasse of Switzerland, and one of the great features of the Highway. . . . For the first time in history it is possible to drive a wagon from the wheat fields of Eastern Oregon through the Cascade Mountains to the sea. . . . An automobile can cover the entire distance in one short day's travel, and no man can estimate the value of this great Highway to all the people of the Pacific Coast."

The cost of building and paving the road approximated two million dollars. Numerous æsthetic bridges increase the effectiveness of river view, waterfall and ravine. In fashioning the road no beautiful thing was marred or destroyed, large sums being at times employed to spare a graceful landmark, or heighten its natural charms.

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FISH WHEEL NEAR BONNEVILLE OREGON ON THE COLUMBIA RIVER

THE STORY OF THE COLUMBIA RIVER

The Columbia River Fisheries

SIX

THE Columbia produces more salmon than any river in the world. From time immemorial native tribes found their chief occupation in the catching and preparation of the toothsome fish. A sack containing rather less than a hundred pounds of dried and pounded salmon was worth in trade as much as a good horse. Since 1861, fish packing has been a profitable industry on the Columbia and its lower tributaries. In 1884, according to government report, nearly 15,000,000 cans of Chinook salmon were exported, the runs being so heavy that hundreds of tons of fish were thrown back into the sea. There are now twenty or more canneries in operation on the river between Astoria, Baker's Bay and Celilo, while thousands of pounds of Chinook (also called quinnat, tyee, king, and spring) salmon are marketed fresh, frozen, smoked, and pickled.

In Astoria, the principal fishing port of the Columbia, "people think, act, and reason in terms of salmon." More than two thousand boats leave the harbor to fish off the Bar, where at the turn of the tide ten thousand fishermen sometimes congregate from up and down the coast. Thirty to forty million salmon are caught in an average year on the Oregon side of the river, their value approximating $4,500,000. The fishermen receive five cents a pound for "green" or fresh salmon, or about half the gross value of the pack. Chinook, the royal species of the family, are at their best in June, when they are often caught weighing fifty to eighty pounds. In one year, 20,000 tons of salmon of all kinds were taken from the Columbia. Two-thirds of this amount was tinned in or near Astoria.

Seines and gill-nets are used between the Bar and the mouth of the Willamette. In the upper reaches of the river many fish wheels are seen in operation. Wheels are built in places near high-water mark where salmon are known to run in greatest numbers, and usually at the head of natural or artificial channels in the river-bed. Kipling mentions in his *American Notes* coming down the river from The Dalles and seeing over a ton of salmon taken as a night's catch from the revolving cups of a giant wheel.

Salmon leave the Pacific and enter the Columbia to spawn early in the spring, the heaviest runs occurring in May, June and July, the catch being greatest in the last-named month. The largest fish are taken in May. The habits of the salmon are a never-ending mystery. It is known that upon entering fresh water they practically cease eating, and their stomachs shrink as their appetities fail. They have, therefore, no temptation to return to their salt water feeding grounds. In going up stream the males lead. Their rate of progress up the Columbia is estimated at one hundred miles a month. When their important mission is accomplished on the spawning grounds at the falls of The Dalles, they drop down the river with the current, most of them supposedly dying before salt water is again reached. We are told that 300 or 400 eggs to each pound weight of the parent fish is the average spawn.

The artificial propagation of the salmon is compared to the sowing of seed by the farmer, with the distinction that the culture of eggs in a hatchery and the distribution of fingerlings lay the foundation for an increased harvest year by year. Since 1895, the United States Government and the States of Washington and Oregon have systematically aided the salmon industry by means of scientific equipment on the Columbia and its tributaries. The salmon and trout hatchery situated at Bonneville, forty miles from Portland, is one of the largest and best equipped on the continent, millions of fry being released annually from its troughs.

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SUNSET AT THE MOUTH OF THE COLUMBIA RIVER

THE COLUMBIA RIVER

By RUTH KEDZIE WOOD

Fellow of the Royal Geographical Society. Author of "The Tourist's Russia," "The Tourist's California," "The Tourist's Northwest," Etc.

MENTOR GRAVURES

WILMER, BRITISH COLUMBIA, IN THE WINDERMERE VALLEY · THE OLD TRADING POST AT ASTORIA, OREGON · THE COLUMBIA GORGE AND CROWN POINT · THE COLUMBIA RIVER HIGHWAY, OREGON · MULTNOMAH FALLS, ON THE OREGON SHORE · FISH WHEEL NEAR BONNEVILLE, OREGON, ON THE COLUMBIA RIVER

FOR historical significance, for scenic environment, and for fascination and vagary in the course of its stream, the Columbia is the premier river of the continent. In length it ranks fourth among the rivers of the United States; in commerical importance it holds fifth place among the rivers of the world. From its source in British Columbia, the international waterway pursues an erratic path for fourteen hundred miles, emptying into the Pacific on the coast of the United States. The area drained by the main stream and its tributaries comprises 250,000 square miles,—a mighty empire whose configuration varies from fertile flatlands to fierce crags and icy ranges, from gray dusty levels and reclaimed acres to soaring cliffs fretted with moss, hung with waterfalls, and surmounted by single peaks which lift their shining summits two miles above the river-edge. No vale more placid than that of the Columbia's birth ever cradled a stream.

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But the waters that track the Windermere meadows with rippling silver break into furious rapids beneath the brow of northern peaks, crowd through hazardous channels in the sunny plains of Washington, and charge a treacherous and curiously disordered course approaching the Cascade Range.

CAPTAIN ROBERT GRAY
Discoverer of the Columbia River

Five mountain chains survey the Columbia during its progress to the sea. The source, Upper Columbia Lake, is at the base of the lofty Purcell Range, west of the Rocky Mountains. Flowing in a northerly direction out of this small body of water, situated eighty miles above the Canadian border, the river moves between forested foothills of the Rockies and the Selkirks. Gathering tribute from both watersheds, it reaches a point two hundred miles north of its source, then turns south, making an inverted U which encloses the Selkirks. Near Revelstoke the Gold Range appears as the western wall of a high-towered valley which continues to the frontier. When at last the Columbia nears the end of its majestic windings, the Cascades run counter to its bed.

The Search for the River

The story of the Columbia embraces the political and economical history and the romance of the Northwest. The existence of a large river flowing from the continental divide to the Pacific was reported by Indians, and became a tradition among the first Spanish adventurers who, about the middle of the sixteenth century, began to explore the coast north of California. In 1602, a Spanish squadron under Vizcaino reported "a rapid and abundant river" whose current at the outlet made exploration too difficult to be attempted by them. Aguilar, commander of one of the Spanish frigates, sighted the estuary of the fabled stream, to which he gave his name—one of several names bestowed upon the great river by Europeans.

THE *COLUMBIA REDIVIVA*
For this ship the Columbia River was named by Captain Gray

In 1766, Captain Jonathan Carver, of the American Provincial troops, undertook a journey from Boston to St. Paul to secure information concerning the Indian nations that inhabited "the back of the Mississippi," and the resources of the "uncultivated parts of America." While camping with the Sioux he learned, so he states in his "Travels," that "the four most capital rivers on the continent of North

America, viz., the St. Lawrence, the Mississippi, the river Bourbon, and the Oregon, or the river of the West, have their sources in the same neighborhood." This, the first printed mention of the name Oregon, was also its first application in the chronicles of white men to the long-sought river. Possibly the Algonquin word *wau-re-gan*, "beautiful water," was interpreted by Captain Carver as Oregon. Joaquin Miller believed the name had "rounded down phonetically from a phrase bestowed by Portuguese navigators, 'Hear the waters,' *aure il agua*, to or-agua, or-a-gon, Oregon."

Though long reported by tribes far inland, and in 1775 definitely located by Heceta, the Spanish discoverer, not until 1792 was the river's unfriendly bar actually crossed. To his eternal renown it was an American, Robert Gray, captain of a Boston trading-vessel, whose insistent enterprise brought the reward that had been sought by European navigators for two centuries. And this is the way it came about.

From a photograph by Howard Palmer
THE RIVER ONE HUNDRED MILES FROM ITS SOURCE
With view of the Selkirks beyond

In the latter part of the eighteenth century, Nootka on Vancouver Island was the center of the fur Eldorado, and the goal of ships flying many and divers flags. Nootka was the first port in North America touched by Captain Cook, and later by Vancouver. The publication of Cook's "Voyages" excited American interest in the commercial value of beaver and sea-otter skins.

Captain Gray and the Columbia

About the hearth of Dr. Bulfinch, in Boston, a partnership was formed by six friends, which resulted in their equipping the ship *Columbia Rediviva* (212 tons) and the sloop *Lady Washington* (90 tons) to trade in fur skins on the Pacific. A medal was struck by the owners to commemorate this important adventure, which was furthered under patronage of President Washington and his Congress. Captain John Kendrick commanded the *Columbia* and Captain Gray the *Washington* on the vessels' first voyage to Nootka, in 1788. Later, Gray embarked on the *Columbia* for

THE COLUMBIA BETWEEN CHELAN FALLS AND WENATCHEE

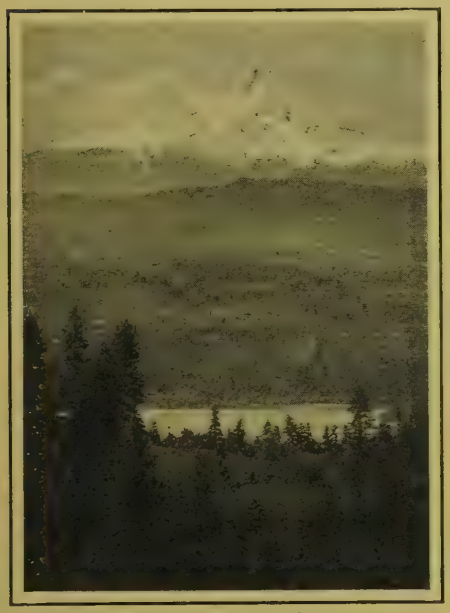
Fur Company, an enterprise chiefly financed by John Jacob Astor, and organized to trade at the mouth of the Columbia on the present site of Astoria, the first American settlement on the shores of the Pacific.

PILLARS OF "THE BRIDGE OF THE GODS"
At the eastern portal of the Columbia Gorge

If we were to follow the wanderings of the peerless river to their end, we would journey in miles nearly half the width of the continent before reaching the Pacific, and descend 2,500 feet before attaining sea level. In the Windermere trench, natal valley of the Columbia, mountains wild and high overlook farms and tree-planted terraces; the young Columbia crawls between pastoral banks, making tranquil mirrors for the sky's reflection. A hundred miles on, the river, gaining vigor from mountain torrents, runs with energy through channels rude and varied. None but adventurers ride the river above Beaver, a station on the trans-continental railroad west of Golden. The occasional surveyor, geologist or mountaineer whose canoe penetrates these little-known wilds is rewarded by amazing views from heights that look upon the glistening flanks of two stupendous ranges. Nine miles west of the swift-flowing river, just below the Big Bend, stands the supreme peak of the Selkirks, Sir Sandford (11,600 feet). This is the loftiest mountain in Canada which can be seen from the river. About its base is a region so choked with forests that attempts to reach the monarch itself were several times frustrated before Howard Palmer and Professor Holway finally attained the crest in the summer of 1912.

HORSETAIL FALLS
On the south wall of the Gorge

In latitude 52, where the great southward wheel is made, the Canoe River, a snow-born stranger from the north, joins the Columbia.



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THE RIVER AND MT. HOOD, IN OREGON

Revelstoke and Arrow Lakes

At Revelstoke, the only Canadian town of importance on the Columbia's banks, the river has an exciting current when the water is normally high. Below the railway and fair Revelstoke's guardian, Mt. Begbie, the waters are drawn into a narrower valley, which curves between green forelands and vari-colored cliffs beneath the gaze of stately snow-caps. The portion of the river extending 130 miles from Arrowhead to Robson constitutes the Arrow Lakes. Few travelers leave the main Canadian Pacific tourist route at Revelstoke to journey down this superb by-way, though good steamers make the run on frequent schedule, and the recompense in scenic sensation is generous out of all proportion to the effort required to see these lakes of glacier-tinted water and snowy reflections.

THE LOCKS AT THE DALLES

The hoydenish Kootenay mates with the Columbia at the foot of Lower Arrow Lake. A few miles south, in the heart of a world-famed gold, silver and copper-producing country, the Columbia is joined by another imposing tributary, Clark Fork, which rises south of Glacier National Park. The junction of these two rivers is at the international boundary. In early times the fur trappers crossed the historic 49th parallel here. Both Americans and British built posts and missions at Kettle Falls. The Spokane River served as highway to the beast-haunted ridges of the Bitter Root Mountains, and played an important share in the history of this part of the Columbia valley before it was United States territory.

Transportation down-river from Kettle Falls is by steamboat—a

thrilling ride through sometimes arduous currents. Again the Columbia abruptly alters its course, turning due west, and then, below the mouth of the Okanogan, making another embracing curve to the southeast.

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THE RIVER FROM ST. PETER'S DOME
Looking north toward Mt. Adams, in the State of Washington

Columbia Basin and The Dalles

For two hundred miles the valley of the Columbia lies between the Cascades and an immense circular plateau, which for nearly three-quarters of its circumference is enclosed by the Columbia and its largest affluent, the Snake River. Irrigation has transformed much of this once barren basin, its dry river courses and profitless benchlands, into a plain abounding in rich harvests.

For sixty miles south of Wenatchee the river-bed is harassed by sharp rocks which make regular navigation impracticable. The Priest Rapids are ten miles long and have a fall of seventy feet. Banks a thousand feet high shut in the river for many miles, then give way to a dun-colored expanse whose monotony led Captain George B. McClellan to report in September, 1853, "On the trail to The Dalles the country is everywhere stony, barren and worthless. The valley of the Columbia, near the mouth of the Yakima, is a vast sage desert." Part of this region which McClellan thought unfitted for colonization has in our day been redeemed by irrigation, and supports millions of fruit-trees set out in methodical rows. Thus do the beneficent waters of the Columbia deck with the apple and the peach-blossom this land that was once a desert.

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MITCHELL'S POINT TUNNEL
On the Columbia River Highway

Near the border line between Washington and Oregon, at Pasco, the river receives the noble stream named the "Snake," or "Lewis Fork," which rises

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SHEPPERD'S DELL
On the Highway

near the bounds of Yellowstone Park, and on its picturesque path through southern Idaho plunges over a precipice 200 feet high and 1050 feet wide, forming the Shoshone Falls, the only cataract on the continent comparable with Niagara. The fact that the Snake and the Missouri Rivers rise within a few miles of each other and flow, respectively, into the Columbia and the Mississippi, partially corroborates the statement of the Sioux Indians to Captain Jonathan Carver concerning the sources of "the most capital rivers" of North America.

At Wallula the Columbia meets the Oregon Trail, over which rumbled pioneers' ox-carts from the mid-West to the shores of the Pacific. Again the mighty river sweeps to the west, cutting through the Umatilla Hills and forming the Washington-Oregon border line. The Spokane, Seattle and Portland Railway follows the north shore, and the Oregon-Washington Railroad and Navigation Company (Union Pacific) the south shore. In addition, there is daily steamboat service between The Dalles and Portland. River traffic from the sea to points beyond The Dalles and Celilo was, until three years ago, impossible because of volcanic rocks and deep troughs, or *dalles*, which for twelve miles block the channel. The Celilo Canal, completed in 1915 at a cost of $5,000,000, now provides a thoroughfare beside the torrential gully, so that craft entering the Columbia at Astoria can proceed 400 miles to Priest Rapids and 550 miles to a point on the Snake River, beyond Lewiston, Idaho.

The city of The Dalles is built on the site of a military reservation commanded before the Civil War by Grant and Sheridan, and is now a chief shipping point for an immense wool and wheat-growing section, extending into central Oregon. In full view of the town is

THE RIVER AT BONNEVILLE, OREGON
Looking toward Castle Rock in Washington

the cloud-piercing cone of Mt. Hood, while across the Columbia Mt. Adams soars high above the Washington shore.

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TRAIN ROUNDING BRIDAL VEIL BLUFFS

The Columbia Gorge

West of the Hood River and White Salmon River valleys, mute evidence of riven walls foretells the Columbia's most spectacular feat,—the sundering of the barrier reared by the Cascade Range. This is the only water passage through a mountain chain which extends south from the Canadian border for over a thousand miles. The Indians account for the cleaving of the mountains by poetic legends. The tale most familiarly known concerns the Bridge of the Gods, which united the two shores and was wrecked by the god that was Mt. Hood when in combat with the deity symbolized by Mt. Adams. The height called Table Mountain (3,500 feet) is supposedly the north pier of the fallen span, the previous existence of which is recognized not by mythologists only but by some geologists as well. In the opinion of scientists, this extraordinary passageway of the river represents ages of gradual elevation of the mountain chain and wearing away by the water.

The range has its name from the cascades that distinguish the fifty-mile gorge of the Columbia. At the eastern entrance the Government has overcome the problem of navigating a perilous expanse of rough water by building a system of locks. The river banks are notable for their astonishing rock forms, for contrasting intervales of lush grasses, for lofty waterfalls and subtly beautiful palisades. Of its kind the scenery in this section of the river's course is unrivaled. The stream flows broadly, its periods of turmoil past. Many of its sentinels of carved basalt are invested with legend and history. Most lovely of all adornments are the cataracts, which overflow the high rim of the foothills on the south bank, and hang, exquisitely white, against backgrounds of foliage or brilliantly tinted granite. From the deck of a steamboat we see in full sublimity Mt. Hood, which John Muir describes as giving "the supreme touch of grandeur to all Columbia views, rising at every turn,

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ST. PETER'S DOME
With a view down the River

solitary, majestic, awe-inspiring, the ruling spirit of the landscape." The town of Vancouver, Washington, opposite the mouth of the Willamette River, bears the name of the storied fort maintained by the Hudson Bay Company as administrative headquarters west of the Rockies, between the years 1825 and 1846. The United States reservation, which succeeded the old fur post, had Sheridan, Kearney and Grant as successive commanders during the first years of American possession.

Portland, Oregon, founded in 1844, is situated ten miles up the Willamette, or Woh-la'-mutt, as the Indians christened it before white men came. This tributary of the Columbia waters a smiling valley which welcomed the first colony of pioneers in the Oregon Country.

The last hundred miles of the Columbia's reach is diverted by the appearance of these mountain wraiths, by strange hilly islands, and by glimpses of busy villages which thrive on the harvest of sea and forest.

A SALMON HAUL NEAR ASTORIA

LOG BOOM NEAR THE MOUTH OF THE COLUMBIA

Occasionally we see from steamer deck, car window or automobile seat an immense log boom headed for the Pacific. The seining grounds are of interest. On the banks are huge salmon canneries. Thirty miles above its outlet the river is six miles wide. Before it reaches the beautifully situated town of Astoria, its breadth is nine miles from shore to shore.

For forty years the Federal Government has been engaged in overcoming the handicap of sand-bars at the Columbia's mouth. Many millions have been spent in dredging a channel between Cape Disappointment and Point Adams, which mark the outerbounds of the magnificent estuary. Persistent ingenuity has finally achieved a passage of sufficient depth to accommodate at all times the proud craft which pass through these portals to the land "where rolls the Oregon."

SUPPLEMENTARY READING

JOURNALS OF THE EXPEDITION OF LEWIS AND CLARK. In several volumes.

ASTORIA *By Washington Irving*

THE COLUMBIA RIVER; Its History, Myths, Scenery, Commerce. *By Prof. W. D. Lyman*

MOUNTAINEERING AND EXPLORATION IN THE SELKIRKS *By Howard Palmer*

THE COLUMBIA, America's Highway Through the Cascade Mountains. *By Samuel C. Lancaster*

GUARDIANS OF THE COLUMBIA *By J. H. Williams*

*** Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

Rivers have personality, like human beings—and they differ from each other in essential respects, just as people do. Some are shallow and transparent, and chatter a great deal. Others are "still waters that run deep." Some are placid and calm, and flow peacefully throughout their whole course, expanding in volume only as they meet the tides of the ocean into which they flow. Others are impetuous and turbulent, dashing their way through all opposing forces. And some rivers are humanlike in their varied moods—calm and quiet in their flow, where the meadowlands are low and conditions are peaceful, stormy and passionate when obstructions oppose them. The character of rivers, like that of men and women, is determined, first, by the original sources from which they come, and then by the circumstances in the midst of which their courses run. Rivers and human beings alike are influenced in their habits by the climatic and physical conditions under which they pursue their ways.

WHERE THE COLUMBIA JOINS THE SEA

★ ★ ★

We human beings feel a sense of kinship to the rivers. We open our hearts to our favorite streams in terms of poetry and song. In most lives some river plays a vital part, and all rivers are cherished with an affection that one's own river has inspired. Those of us that know and love the Hudson take a fond interest in learning about the Columbia, the Mississippi, and the St. Lawrence. Those that have lived under the spell of the Niagara Rapids find a like fascination in the Colorado torrent that tears its way through the Grand Canyon.

★ ★ ★

For this reason The Mentor series of "Stories of the Rivers" makes a strong appeal to readers. In this series the stories of the Rhine, the Danube, and the Hudson have already been told. The present number, telling of the Columbia River, will be followed shortly by the Story of the Mississippi, and of the St. Lawrence, the Ohio, and the Colorado. Then the Nile, the Ganges, the Amazon, and other great waterways of the world will flow in turn through the pages of The Mentor, each one bearing on its current a wealth of historic and romantic associations.

★ ★ ★

Have you read the "River" Mentors that have already appeared? If you like this number you should have the others. In fact, as a good member of The Mentor Association you should have *all* the back numbers. They are just as interesting and valuable as the current numbers. Don't make the mistake of regarding The Mentor as a *magazine*, and of relegating back numbers to limbo. The Mentor is not a magazine—it is a *course in popular education*, and all numbers of The Mentor are, and will remain, important, vital parts of the course. The essentials of knowledge never get out of date. The Mentors on Shakespeare, Michelangelo, Joan of Arc, The French Revolution, and Gothic Architecture are just as attractive and instructive today as they were when we published them some time ago. Many Mentor readers appreciate this, but not enough of them. Last year nearly half a million back numbers were ordered. Considering the large membership of The Mentor Association, a million back copies ought to have gone out. Every member ought to have a full Mentor library. Send for our descriptive booklet, and see what a fascinating list of subjects are covered in back numbers. We keep all of them in stock, all the time—and we can supply bound sets too. Ask us about this.

W. D. Moffat

EDITOR

COURTESY U. S. GEOLOGICAL SURVEY

FOSSIL FERN FROM COAL MINE

ONE

WHILE the vegetable origin of coal is beyond question, two rival views are current among geologists to account for the deposit of ancient plant material in the form of coal-beds, such as we now find in the earth. One school of geologists holds that the coal plants grew in great lagoons and swamps, like the mangrove swamps of today, and that the modern coal-beds mark the locations of these swamps. From time to time these areas subsided and were flooded with water to such a depth that the plants were killed. Eventually the decayed vegetation of the former swamps was covered with a layer of mud or sand. Later a slow upheavel of the ground brought these regions again to the surface; a new swamp formed, only to be submerged again at a later period; and the same process was repeated several times in the course of hundreds of thousands of years.

The bulk of evidence seems to favor this view, but there is another. Perhaps the coal-beds are not the sites of former swamps, but of estuaries and ocean shores where the plant material settled down, in still water, after a long drift down the ancient rivers from its place of origin. It is not impossible that both explanations are correct; some coal-beds having been formed in one way, and some in the other. With the progress of time the deposits of sand were compacted into sandstone, and the mud and clay into shale; while the layers of vegetation were solidified by pressure, some of their constituents were vaporized and expelled by heat, and the final product was coal.

The coal-measures abound in fossil plants of species long ago extinct, and we also find the molds or casts of plants that have themselves disappeared, leaving only their impressions in the mud by which they were once enveloped. These records of ancient vegetation are mostly found in the rocks just above and below the coal-beds, and not in the coal itself.

The plants of the Carboniferous Period, during which most but not all of the coal-beds were formed, bore a family likeness to certain kinds of plants that flourish today. Many of them were ferns, ranging in size from the smallest species up to great tree-ferns. Others resembled our modern horsetails or scouring-rushes, with their fluted and jointed stems, but these *calamites*, as the geologists call them, grew to the size of trees, sometimes eighty or ninety feet in height. Some plants of the coal age were like the modern cycads (intermediate in appearance between tree-ferns and palms); some were like the ginkgo, a tree with leaves like those of maidenhair fern, widely introduced into this country from China and Japan. One of the commonest and largest trees was the *lepidodendron*, closely resembling, except in its vastly greater size, the club-moss or ground pine which we know so well as a Christmas decoration.

The animal life of the period, of which, also, abundant fossil remains are found, included mollusks, fishes, crustaceans, insects, spiders, thousand-legs, snails, reptiles and lizards. Some of the insects were a foot or more in length. Of cock-roaches, alone, more than five hundred species have been found in the coal-measures.

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COURTESY U. S. BUREAU OF MINES

TIPPLE AT BITUMINOUS COAL MINE GARY, WEST VIRGINIA

WHEN a coal famine is upon us there is a grain of comfort in the reflection that beneath the soil of this country, and within 3,000 feet of the surface, there still lies 3,538,554,000,000 tons of coal. This is the estimate of the United States Geological Survey. We have mined coal wastefully and used it prodigally, yet we have taken from the ground, up to the present time, only a fraction of one per cent. of the total amount at our disposal. The whole of our "coal reserves," if they could be extracted and placed in a great cubical pile, would form a mass 8.4 miles long, 8.4 miles wide and 8.4 miles high. If the coal thus far mined were piled up in the same way, the cube would be 7,200 feet long, 7,200 feet wide, and 7,200 feet high.*

The coal-producing areas of the country are divided into six great divisions, known as the Eastern Province, the Interior Province, The Gulf Province, the Northern Great Plains Province, the Rocky Mountain Province, and the Pacific Coast Province. The Eastern Province contains probably nine-tenths of the high-rank coal of the country. It is made up of the anthracite regions of Pennsylvania and Rhode Island, the Atlantic coast region of Virginia and North Carolina, and the great Appalachian region, which embraces all the bituminous and semi-bituminous coal of what is called the "Appalachian trough." The state of Pennsylvania produces 47 per cent. of all the coal mined in the country, and nearly all of the anthracite.

The Appalachian region is the greatest storehouse of high-rank coal in the United States, if not in the world. "This near-by and almost inexhaustible supply of high-grade fuel," says the Geological Survey, "has been the foundation of the development of the blast furnaces, the great iron and steel mills, and the countless manufacturing enterprises of the Eastern states."

The Interior Province includes all the bituminous coal fields and regions near the Great Lakes, in the Mississippi Valley, and in Texas, and is made up of four distinct sections—the northern (Michigan), eastern (Illinois, Indiana and western Kentucky), western (Iowa, Missouri, Kansas, Oklahoma and Arkansas), and southwestern (Texas). The coal of this province is not, in general, of as high a quality as that of the Eastern Province, but it is very extensively mined, and is used for heating and for generating power in the many cities and towns of the Mississippi valley and the Great Lakes region. Indeed, extensive coal fields in proximity to rich agricultural lands have made possible the existence of such manufacturing centers as Chicago, St. Louis and Kansas City, and have been a leading factor in the development of the vast railway systems of the Middle West.

The Gulf Province is at present of little commercial importance. Its coal is mined only at a few places in Texas, and is mostly lignite.

The Northern Great Plains Province includes all the coal fields in the Great Plains east of the Front Range of the Rocky Mountains. The coals are of low rank, being either lignite or sub-bituminous, except in a few of the basins near the mountains. The largest coal region in this province is the Fort Union region, lying in the Dakotas, Montana and Wyoming. The amount of unmined coal in this region is estimated to be twice as great as that lying in the rich Appalachian region, but it has been little worked, as it is generally of poor quality.

The Rocky Mountain Province contains a greater variety of coal than any other province in the United States. It includes all ranks, from lignite to anthracite, but the prevailing ranks are sub-bituminous and low-grade bituminous.

The coal of the Pacific Coast Province is mined chiefly in the state of Washington, where it has aided in developing the industries of the Puget Sound region. Oregon and California have small fields, but the coal is of poor quality, and little mining has been attempted.

*These figures were furnished by Mr. M. R. Campbell, of the U. S. Geological Survey. They differ materially from figures previously published by the Survey.

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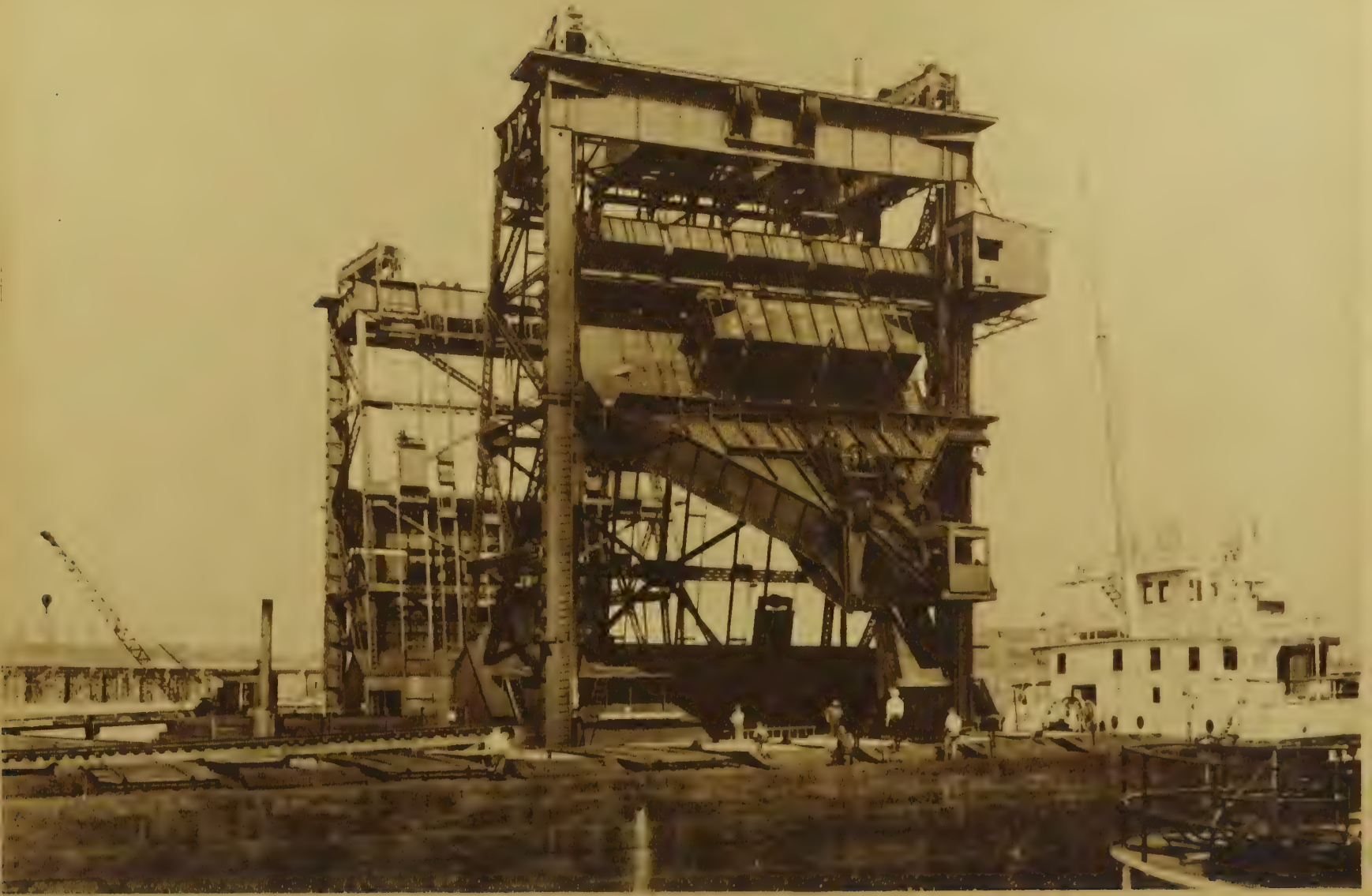

COURTESY BROWN HOISTING MACHINERY CO., CLEVELAND O.

COAL CAR DUMPER IN OPERATION

THREE

IN times gone by coal was carried out of the mines on the shoulders of men and women, and then transferred in wheelbarrows to the sailing-vessels or wagons in which it was taken to market. In progressive mines of today the coal is loaded in the mine into small mine cars, which are hauled and hoisted to the surface by electricity or steam. The mine cars are dumped on an elevated platform called the "tipple," and the coal passes through chutes or conveyors to the railway cars waiting underneath to receive it. On its way downward it undergoes a more or less elaborate process of screening, breaking, picking, washing, etc., according to the kind of coal and the purpose for which it is to be used.

The coal reaches the market by three general methods of transportation: (1) All-rail; (2) rail to the seaports, where it is used for bunkering steamers or carried by vessels to other ports, foreign and domestic; (3) rail to the Great Lakes, especially Lake Erie ports, from which it is carried to ports on the upper lakes, and from the latter again by rail to markets in the interior. The railroads themselves use about one-fourth of all the coal mined in this country. The coastwise coal-carrying trade is mainly by wooden barges towed by steamers, though much coal is also carried by schooners, some of which can carry a cargo of 5,000 tons or more. About four per cent. of the bituminous coal output goes to foreign countries.

"The consumption of coal," says the United States Geological Survey, "is a measure of the industrial activity of a people, for as yet coal is the main source of mechanical energy. In this respect the United States is the foremost nation, its average annual consumption of coal for all purposes being about five tons per capita. Prior to the present war in Europe the consumption of coal per capita in England, Belgium and Germany was about four tons, in Russia a quarter of a ton, and in France about 1.6 tons."

Marvelous forms of labor-saving machinery have been introduced to facilitate the loading and unloading of coal. The principal form of apparatus for transferring coal either to or from a vessel is the "bridge tramway plant," which consists of long steel bridges mounted side by side on suitable rails so that they can be moved into place over the hatchway of a vessel. Huge buckets, which load and unload themselves, are carried on a "trolley," suspended from the bridge, and transfer coal at high speed from the vessel to the stock pile or railway cars, or *vice versa*. The cost of loading coal by this method is only a cent or two a ton.

Another ingenious device is the "car-dumper." This powerful machine picks up bodily from the railway track a car loaded with a hundred tons of coal, overturns it, and discharges its contents into the hold of a vessel; after which it returns the car to the track. It is capable of handling fifty cars an hour. It is equipped with special apparatus to prevent the coal from being discharged too violently, and thus being badly broken up.

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CHARGING COAL IN A MODERN GAS PLANT

THE story of the coal products forms one of the most romantic chapters in the history of applied science. The marvels of fairyland are surpassed by the achievements of the modern manufacturer in obtaining from mere black rocks dug out of the ground not only heat and light, but a bewildering variety of useful gases, liquids and solids—drugs, chemicals, dyestuffs, and so forth.

For hundreds of years it has been known that when coal is covered or enclosed, to keep out the air, and then heated for a certain length of time, instead of burning to ash it is converted into a porous grayish-black substance called "coke." This material, which burns without smoke or flame, is a valuable fuel for many purposes; especially for use in blast-furnaces for the smelting of ore. Nowadays coke is made on a vast scale from certain grades of bituminous and semi-bituminous coal. The coal is heated in "coking-ovens," of which there are several kinds. The most common form of oven in this country is the "bee-hive oven," which produces coke only. Another type of coking-oven, more generally used in Europe than in America, is the "flue-oven," which produces, besides coke, a number of valuable by-products.

When coal is converted into coke it gives off combustible gases. The idea of saving these gases and using them for illuminating purposes was first practically applied in the latter part of the eighteenth century. "Coal-gas" is made by heating coal in a closed vessel, called a "retort." It is a mixture of hydrogen and methane (a compound of hydrogen and carbon), with small amounts of several other gases. Most of the carbon in the coal remains in the retort as coke, which is, therefore, a by-product in the process of making coal-gas. After the gas is given off from the coal it passes through a series of vessels, where, by chemical and other methods, it is freed from ingredients which would impair its value as an illuminant, but which are saved and used for other purposes; the most important of these are "coal-tar" and "ammoniacal liquor." The purified coal-gas is finally conveyed to a gas-holder or "gasometer," from which it is distributed to the consumers.

In recent times other methods of gas-making have come into use. In one of these nearly all the carbon in the fuel is turned into a combustible gas by passing air through the hot coal. The product is known as "producer-gas," and is very valuable for use as fuel and as a motive power in gas-engines, but it is not an illuminant. A modification of this process, in which steam is passed over the heated fuel, gives a mixture of hydrogen and carbon monoxide, known as "water-gas." This is also a valuable source of heat and power; but for use as an illuminant it must be mixed with a gas made from oil. It is then known as "carburetted water-gas," and is very extensively used for lighting purposes; either by itself or mixed with ordinary coal-gas.

Of the by-products of gas-making, ammoniacal liquor was, until recently, the only commercial source of ammonia. Coal-tar, formerly thrown away as worthless, is today the source of innumerable substances of immense value to science and the industries. From coal-tar are obtained benzine, toluene, xylene, phenol (carbolic acid), naphthalene, anthracene, etc., and these more direct products are combined with one another or with other chemicals to produce coloring matters, explosives, perfumes, flavoring materials, sweetening substances, disinfectants, medicines, photographic developers—in short, a little of everything. The total number of coal-tar products runs into the thousands, and is constantly being increased by fresh discoveries.

In Germany, just before the war, the industries engaged in making these products (no longer *by*-products, but far more important than coke and gas) were capitalized at $750,000,000. One firm made no less than 1,800 coal-tar dyes, besides 120 pharmaceutical and photographic preparations.

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SMOKE PROBLEM SCENE IN PITTSBURGH BEFORE AND AFTER THE SMOKE CURE

SMOKING is a costly and injurious habit. This is not the beginning of an appeal on behalf of the anti-cigarette crusade, but the introduction to a few facts in regard to the far-reaching effects of smoky chimneys. The smoke nuisance is as old as the use of coal. In the fourteenth century a man was executed in London for befouling the air of that city with the fumes of "sea-coal," as ordinary mineral coal was once called in England, because it was brought to London by sea. Under Queen Elizabeth a law was passed forbidding the burning of coal while Parliament was in session, as the legislators believed their health was likely to be impaired by the smoky air of the city. What would these bygone gentlemen say if they could see modern London enveloped in one of its famous "pea-soup" fogs—the color and denseness of which are entirely due to coal-smoke?

Smoke is injurious to health, destructive to vegetation, and fatal to architectural beauty; and, along with all this, it is enormously expensive. In the first place, a smoky chimney means imperfect combustion, and a waste of part of the heating value of fuel. Then a smoky atmosphere entails big laundry and dry-cleaning bills; frequent repainting of houses; injury to metal work; damage to goods in shops; excessive artificial lighting in the daytime. Pittsburgh was once the most famous American example of all these evils, but it has recently reformed. Before the Mellon Institute of Industrial Research carried out its elaborate smoke investigation in that city, and, in consequence, stringent smoke-abatement ordinances were adopted, the annual smoke bill of Pittsburgh was estimated at nearly ten million dollars. The city was the paradise of the laundryman, and light-colored clothing was so little worn by the inhabitants that it was known as "the mourning town."

Throughout the United States it is said that smoke causes an annual waste and damage amounting to half a billion dollars. No wonder numerous societies have been formed to mitigate this evil, and a great many laws have been enacted on the subject. With a gradual increase in the use of gas, coke and other smokeless fuels, and improved methods of stoking furnaces, the smoke nuisance is now happily abating.

The pollution of the air by smoke is the subject of systematic investigation and measurement at certain places in this country and abroad. Measurements of the "soot-fall" made in Pittsburgh a few years ago indicated an annual average deposit of soot in that city amounting to 1,031 tons per square mile. London's average is 248 tons per square mile for the whole city and 426 tons in the central districts. In the heart of Glasgow the annual soot-fall is 820 tons per square mile.

In Great Britain there is a Committee for the Investigation of Atmospheric Pollution, which has installed standard measuring apparatus in sixteen English and Scotch towns. The soot is collected in a "pollution gauge," consisting of a large cast-iron funnel, enameled on the inside. Projecting above the gauge is a wire screen, open at the top, to prevent birds from settling on the edge of the vessel. The gauge communicates at the bottom with one or more bottles for collecting rain-water, with its solid contents. The bottles are emptied once a month, when their contents are weighed and analyzed.

Smoke is injurious to the respiratory organs, conducive to eye-strain and responsible for a lowering of human vitality. The gloominess of a smoke-laden atmosphere also has a depressing effect upon the minds of many people.

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COURTESY U. S. BUREAU OF MINES

RESCUE PARTY ENTERING MINE AFTER EXPLOSION

SINCE the year 1870, some 60,000 men have lost their lives as a result of coal mining accidents in this country. This is approximately one fatality for every 180,000 tons of coal mined. Gradually this bad record is being improved, thanks to the combined efforts of the United States Bureau of Mines, the mining departments of the various states, the operators and the miners themselves; but coal mining remains a hazardous pursuit.

Falls of the roof are responsible for more accidents than any other single cause. These are likely to occur wherever the roof is not fully timbered; especially in the "rooms," where the coal is being blasted out. Many accidents also occur in mine shafts, notwithstanding the various safety devices with which the "cage" or elevator is nowadays provided.

Fires and explosions attract a greater amount of public attention than other mining disasters on account of the large number of victims so often involved in a single occurrence of this kind. In the explosion at the Courrières colliery, in France, March 10, 1906, more than 1,100 miners perished. This mine had previously been renowned for its freedom from accidents. Coal mine explosions are due to two principal causes, which may act either separately or in combination—fire-damp and coal-dust. Accumulations of fire-damp, or methane, locked up in the coal seams, are liberated by the removal of the coal. Frequently streams of this gas gush forth with a hissing noise, and are known as "blowers." Fire-damp is explosive when combined with certain proportions of air. Apart from ventilation, which dilutes the gas below the danger limit, the principal precaution against explosives is the use of safety-lamps, so constructed that the gas cannot come in contact with a naked flame. An excessive amount of coal-dust in the air of the mine may also give rise to explosions. Such explosions may be prevented by wetting the dust, moistening the air, or powdering the walls, roof and floor with a non-explosive "rock-dust."

After an explosion the air of a mine contains a large amount of the deadly gas carbon monoxide, and this "after-damp," as it is called, makes rescue work extremely dangerous. Wherever suitable apparatus is available, the rescuers carry with them a supply of oxygen, by breathing which they are able to live for some hours in a poisonous atmosphere. The Bureau of Mines has established a number of rescue stations in the coal-mining districts and maintains several mine safety cars for hurrying rescue crews to the scene of a disaster. The Bureau also instructs the miners in first-aid and rescue work, and is directing a national campaign in behalf of "safety first" in mines.

Of the many methods that have been devised for testing the air of mines for noxious gases none is more interesting than the use of caged canaries. These birds are much more susceptible than human beings to the effects of carbon monoxide, and show signs of distress before a man begins to feel any discomfort from the gas. In many mines they are carried in routine inspections. After an explosion the number of rescuers equipped with oxygen apparatus is always limited. These form the advance guard, and are followed by men without apparatus, who carry canaries, by observing the behavior of which they can tell how far they may safely penetrate into the mine. The Bureau of Mines has devised a special form of cage in which the canary may be revived with oxygen after being overcome with gas. Experiments show that the bird may be asphyxiated and revived again and again without suffering any ill-effects; neither does he acquire an immunity to poisoning which would make him a less reliable indicator.

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Courtesy of Brown Hoisting Machinery Co.

COAL-HANDLING MACHINERY ON PITTSBURGH COAL CO. DOCKS, DULUTH, MINN.

An electric trolley, with 5½-ton bucket, travels on each bridge, carrying coal from the boat to storage, or to railroad car, or to screening apparatus in the rear

THE STORY OF COAL

By CHARLES FITZHUGH TALMAN

Editorial Writer for the Scientific American

MENTOR GRAVURES

FOSSIL FERN FROM COAL MINE · TIPPLE AT BITUMINOUS COAL MINE · COAL CAR DUMPER IN OPERATION · CHARGING COAL IN A MODERN GAS PLANT · SMOKE PROBLEM, SCENE IN PITTSBURGH BEFORE AND AFTER SMOKE CURE · RESCUE PARTY ENTERING MINE AFTER EXPLOSION

WERE it possible for the lump of coal that we burn in our stove, grate or furnace to tell its story, it would take us back millions of years to a time when vast areas of the earth's surface were covered with swamps, supporting a luxuriant vegetation. No human being, mammal or bird yet existed. Animal life included fish, shellfish and other aquatic species, besides reptiles and insects. The vegetal forms resembled our modern ferns, horsetails, club-mosses and evergreens. The atmosphere was heavily charged with moisture, and a mild climate prevailed even in the polar regions. Such were the conditions under which, during the great Carboniferous Age, most of the existing coal-beds were deposited in the earth.

Coal is the litter of primeval swamps and forests. Year after year the débris of the humid jungles accumulated in shallow water or in the boggy soil, where it underwent partial decay, and was thus converted,

Entered as second-class matter March 10, 1913, at the postoffice at New York, N. Y., under the act of March 3, 1879. Copyright, 1918, by The Mentor Association, Inc.

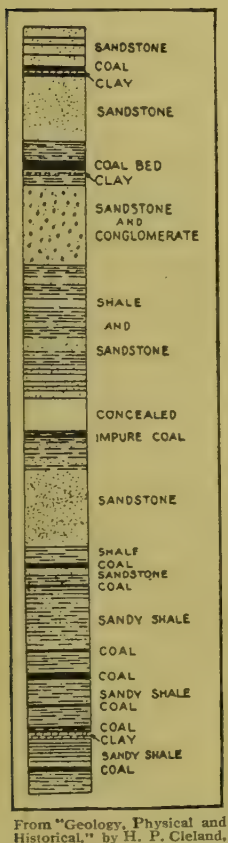
first of all, into the slimy or spongy material known as "peat." Similar deposits are in process of formation in the swamps of the present day, and the peat obtained from them is dried and used as fuel on an extensive scale in some parts of the world; especially Ireland, Holland, Germany and Scandinavia.

FOREST SWAMP OF THE CARBONIFEROUS PERIOD (Coal Age). From a drawing by Potonié and Gothan

Gradual changes in the elevation of the land led to the submergence of the prehistoric peat bogs, during successive intervals of time, by lakes or shallow seas. Thus their vegetation was killed, and they were overspread with layers of mud or sand, above which, during a subsequent period of elevation, a new peat bog would form; and this process was repeated several times. The conversion of the peat into coal appears to have resulted from the pressure of the overlying strata, probably aided by the internal heat of the earth. Much of its moisture was squeezed and evaporated out; the proportions of its component gases were reduced; and the result was a hard mineral, which has earned the popular name of "black diamond" because consisting chiefly of carbon—the same chemical element which, in a pure and crystalline form, constitutes the true diamond. Chemically, coal consists of carbon; the gases hydrogen, nitrogen and oxygen; sulphur; and ash (the mineral matter that remains after combustion).

The record of these long-ago events is found when we sink a shaft through typical coal-bearing strata. We pass through not one, but several, layers of coal, which may vary in thickness from a fraction of an inch to a hundred feet or more, and are separated by generally much thicker layers of sandstone or shale (solidified clay). The layers of coal are known as "coal-beds." Unless a coal-bed is at least two feet thick it is hardly worth working, and, ordinarily, the thickness of a bed does not exceed eight or ten feet. The shale or sandstone above a bed is very commonly found to contain the remains or the impressions of the ancient plants from which the coal was formed. A study of these remains and casts has made it possible to classify hundreds of species of plants now extinct. Fragments of plants are also sometimes found in the coal itself, and thin slices of coal frequently show a

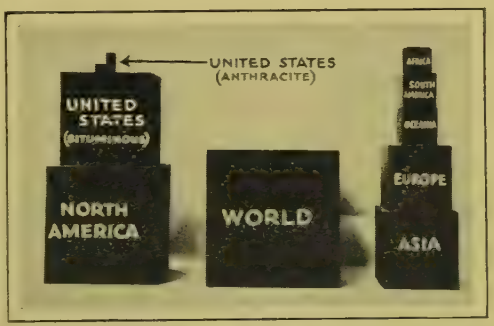
CONCRETE PORTAL OF A "DRIFT" MINE



From "Geology, Physical and Historical," by H. P. Cleland, American Book Co., N. Y.

Section of coal-bearing strata in Pennsylvania, showing relative amount of coal and barren rock in a rich field

vegetable structure under the microscope. Finally, to furnish conclusive proof of the vegetable origin of coal, we find under the coal-bed a layer known as the "underclay," which is a fossil soil filled with the roots and rootlets of the coal-producing plants. Different conditions of formation, and also, probably, differences in the character of the original vegetation, have resulted in the production of different kinds of coal. The most important heat-producing constituent in coal is the elementary substance called "carbon," and the simplest classification of solid fuels depends upon the percentages of fixed (non-volatile) carbon they contain, the average percentages running as follows: Wood, 50%; peat, 55%; lignite, 73%; bituminous coal, 84%; anthracite coal, 93%. When fuel is burned the greater part of it unites chemically with the oxygen of the air to form certain invisible gases—especially carbon dioxide and water-vapor—and only the ash remains.



Courtesy of United States National Museum

Comparative coal supplies of the world. The nick in the smallest cube shows how much hard coal has been used up. Soft coal cube has hardly been scratched

In the popular mind coal is classified as hard or soft, while hard coal is further classified according to the size of the lumps. For both scientific and industrial purposes more elaborate classifications are necessary, and several have been used or proposed.

COAL FIELDS OF THE UNITED STATES

Kinds of Coal

The United States Geological Survey classifies coals, first of all, according to "rank," depending upon both chemical and physical characteristics. Anthracite,

which contains the largest percentage of carbon, ranks highest, and lignite, with the smallest percentage of carbon, lowest. Coals of the same rank are said to be of high or low "grade," according to whether they contain a relatively small or large percentage, respectively, of ash and sulphur. The ranks recognized by the Survey are: Anthracite, semi-anthracite, semi-bituminous, bituminous, sub-bituminous, and lignite.

Courtesy of U. S. Bureau of Mines

AN "ENTRY" IN A COAL MINE
Showing timbered roof

"Anthracite" is the hardest of coals. It was formed from bituminous coal under the crushing pressure due to the upheaval of mountains or by the intense heat of adjacent molten rocks. Most American anthracite is mined in eastern Pennsylvania. The largest deposits in the world are found in China. Anthracite burns slowly, with little smoke. It is well adapted for domestic use on account of its cleanness, but is not an economical fuel for steam-raising or general manufacturing.

Courtesy of U. S. Bureau of Mines

COATING WALLS OF A MINE WITH CEMENT
To prevent coal-dust explosions

"Semi-anthracite" also ranks as a hard coal, though it is less hard than anthracite. Very little is mined in this country, and it is generally sold as anthracite.

"Semi-bituminous" coal is a softer coal, which, when properly burned, gives off but little smoke. The best semi-bituminous coal ranks highest among the coals in heating value. It is the most valuable fuel for manufacturing purposes; also for steamships, as it requires less bunker space per unit of heat than any other coal.

"Bituminous" coal, or ordinary "soft coal," burns readily, with a smoky flame, and is the coal most commonly used for manufacturing purposes; in fact, the bulk of the coal mined throughout the world belongs to this rank. It includes a good many varieties, some of which are extensively used in making coke, while others, such as "cannel" coal,

have been in great demand for use in gas-works. Nowadays, however, the widespread introduction of "water-gas,"* which does not require any particular kind of coal, has diminished the demand for "gas coals."

"Sub-bituminous" coal, or "black lignite," is common in some of our western coal fields. It is a clean and useful domestic fuel when used near the mines, but is not very satisfactory for shipment, as it shrinks and crumbles under the effects of "weathering" and is liable to spontaneous combustion.

DRILLING IN COAL FOR BLASTING

"Lignite" is the least valuable of coals, and is the form of coal which is the least altered from the original peat. The Geological Survey applies this name only to those coals which are distinctly brown and either markedly woody or claylike in appearance. Lignite, as it comes from the mine, contains from thirty to forty per cent. of moisture, and it "slacks" or falls to pieces much more rapidly than sub-bituminous coal when exposed to the air. It is hardly suitable for transportation.

For commercial purposes coal is also classified according to size. The coal as it comes out of the mine, without any sorting into sizes, is known as "run of mine," and the semi-bituminous coals are commonly shipped in this form. Most coals, however, are passed over bars or gratings, which constitute screens of different degrees of fineness; each screen permits all the lumps below a certain size to fall through, and thus the coal is divided into the different standard sizes. The sizes of anthracite, from the smallest to the largest, are: rice, buckwheat, pea, chestnut (or nut), stove, egg, broken (or grate), steamboat, and lump. Bituminous coal is divided into slack, nut and lump (the largest size). A mixture of lump and nut is called three-quarter coal.

Press Illustrating Service

MODERN ELECTRIC LOCOMOTIVE
Used for hauling coal from the mines

*Made by forcing steam over glowing coal or coke. See Monograph No. 4.

Press Illustrating Service

MODERN MINING MACHINE

for undercutting coal. The "cutter bar" is shown in front, filled with "cutting teeth" set in a chain that travels around. See illustration opposite

The Modern History of Coal

The age of the steam-engine is also the age in which the use of coal has become widespread, and the output of coal is a faithful index of industrial progress. Although the Greek writer Theophrastus (about 300 B. C.) mentions the use of coal as a fuel, and its use was also known to the ancient Britons and the Chinese, it was virtually unknown throughout the Middle Ages. The first record of coal mining in England is of the year 1180 A. D., and coal was first shipped to London in the year 1240. It was long known as stone-coal, pit-coal, etc., to distinguish it from charcoal; also as sea-coal, on account of being carried to London by sea. Bituminous coal was first mined in America in 1750, near Richmond, Virginia. Anthracite was discovered in Rhode Island in 1760, and in Pennsylvania in 1766, but for many years its value was not recognized. As late as the year 1812 Colonel George Shoemaker, of Pottsville, was treated as an impostor and threatened with arrest for attempting to sell a few wagon-loads of anthracite in Philadelphia; methods of burning it were not understood, and it was declared to be merely "black stone." In the year 1820 only 365 tons of anthracite were sold in this country, as compared with the present annual output of about 90,000,000 tons.

Before the days of the railway coal was shipped mostly by water in rough boats called "arks," which floated down the rivers to the seaboard towns. As it was impossible to return against the current, the ark was sold with the coal at its destination. A great many arks were wrecked in transit, and the whole process of transportation

Press Illustrating Service

SHAKER SCREENS IN A TIPPLE HOUSE

The coal passing over screens is graded according to size

was a costly one. Only with the introduction of steamboats, canals and railways, did the coal industry assume serious proportions.

The production of coal in America has grown at an amazing rate. In the year 1868 Great Britain produced 3.6 times as much coal as the United States, and the output was also exceeded by that of Germany. In 1899, the United States took the lead. At the present time, with an estimated production for the year 1917 of 643,600,000 tons, the United States is producing nearly half of all the coal mined in the world. Great Britain ranks second, closely followed by Germany.

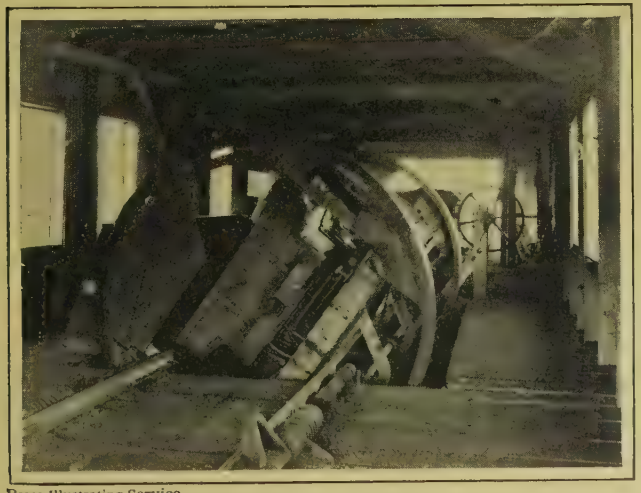
"CUTTER BAR" AT WORK

The bar, with its cutting chain of teeth, makes a horizontal cut deep into the bottom of the seam of coal. Blasting then does the rest

How Coal is Mined

A relatively small amount of coal is quarried near the surface of the ground from open pits. The overlying soil is removed by steam-shovels, and the coal is then blasted out and shoveled into cars.

Most coal is mined underground. Access to the coal-beds is obtained either by sinking a vertical "shaft" or by driving a tunnel, according to the location of the beds. A tunnel driven at a steep angle is called a "slope." A horizontal tunnel leading into a coal-seam is called a "drift."



Press Illustrating Service

ROTARY DUMP IN A TIPPLE

Showing a coal car half turned over in order to dump contents

In this country few coal mines are more than 300 or 400 feet below the surface, and the deepest is about 1,600 feet. Much deeper mines are found in Europe, especially in Belgium.

American mine shafts are generally rectangular and are divided into two or more compartments. Where a shaft passes through water-bearing strata it must be provided with a tight lining, or "tubbing," to prevent the mine from being

flooded. All water that enters the mine collects in an excavation, or "sump," at the bottom of the shaft, and must be pumped to the surface.

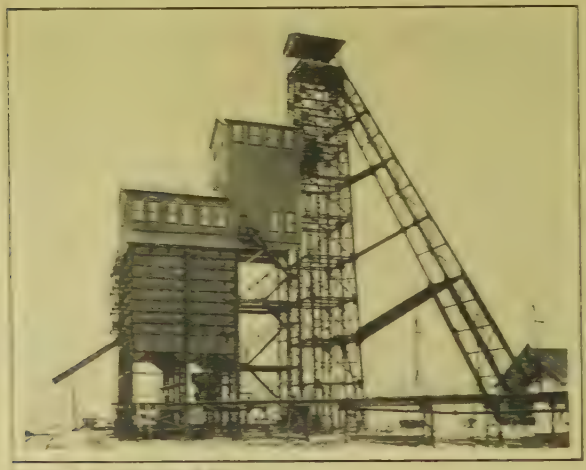
Courtesy of "Coal Age"

SPIRALIZING MACHINES

which, by rotating motion, separate the coal from slate

The method of working coal-seams most commonly practiced in this country is known as the "room-and-pillar" system. One or more tunnels, or "entries," are first driven from the bottom of the shaft or the mouth of the drift. These are the main thoroughfares of the mine, and are usually provided with tracks, over which the mine cars are hauled by mules or by some other method of traction—locomotives, endless chains, etc. Secondary entries ("headings," "butt entries," etc.) branch off from the main entries. Finally, the work of extracting the coal consists of excavating open spaces, or "rooms," adjoining the entries.

The actual mining is done in the rooms, and different methods are in use. Anthracite is generally "shot from the solid"; that is, blasted out from the face of the coal without any preliminary cutting. This method is objectionable, especially in bituminous mines (where it is, however, much practiced), because the large charges of powder it requires produce a great deal of coal-dust and weaken the roof and pillars, often leading to falls of coal and fatal accidents. A better plan consists of "undercutting" the coal before it is blasted out. A long groove is made at the level of the floor, either with a pick or with a coal-cutting machine. Holes are then drilled some distance above the groove for the insertion of the blasting charges, and the coal is blasted down. A single shot will sometimes dislodge a ton or two of coal.



Courtesy of U. S. Bureau of Mines

MODERN HEADFRAME, BINS AND TRESTLE

Of fireproof construction. Anthracite coal mine

The next step is to shovel the coal from the floor into a mine car, which is then pushed

into the adjacent entry. The miner attaches a numbered tag to the car, so that he will be duly credited for his work, which is paid for by the ton. The loaded cars are eventually hoisted or hauled out of the mine, to be weighed and discharged above ground.

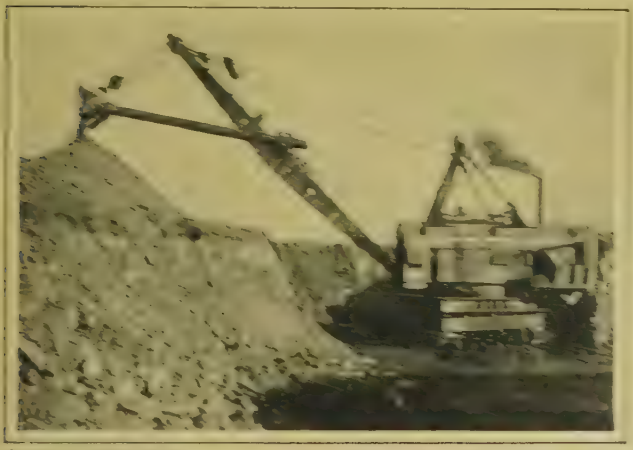
The final step in working a coal-seam by the room-and-pillar method is to mine out the thick walls or pillars of coal, which are originally left between adjacent rooms to support the roof. As this work proceeds the worked-out sections are filled with waste rock, or the roof is allowed to fall. The object is to leave as little coal in the mine as possible, but practically it is rare that more than 60 or 70 per cent. is recovered.

Courtesy of "Coal Age"

MODEL COAL BREAKER

Note the neat and careful "upkeep" of the place

One feature of a coal mine that must be carefully planned is the system of ventilation. This is provided not merely for the comfort of the miners, but to prevent, as far as possible, the accumulation of poisonous and explosive gases. There are always at least two airways leading into the mine (one or both of which may also be used for hoisting or other purposes), known as the "upcast" and the "downcast," according to the direction in which the air passes through them. A current of air is maintained either by keeping a fire burning at the bottom of the upcast or by the use of powerful fans or blowers. A system of tight trap-doors prevents the air from taking a short cut between the downcast and the upcast, and thus leaving the greater part of the mine unventilated.



Courtesy of "Coal Age"

MINING FROM THE OUTSIDE

Stripping the surface of a coal-bed with steam shovel, at Pittsburg, Kans.

The coal in the mine constantly gives off various gases, one of which, the notorious "fire-damp" (methane or marsh-gas), is responsible for many

explosions. In recent years it has been discovered that coal-dust itself, when mixed with the right proportion of air, is violently explosive. Mine explosions may be minimized by requiring the use of "safety-lamps" (oil, gasoline, or electric); by providing devices to prevent sparking in electrical apparatus; and by using for blasting operations only so-called "permissible" explosives, which give a shorter and cooler flame than black powder. Coal-dust explosions can be largely prevented by wetting the walls of the mine, or by the new process of "rock-dusting," which consists of applying dry incombustible powdered rock to all surfaces. Unfortunately, none of these precautions are employed as generally as they should be.

Courtesy of U. S. Bureau of Mines

WATCHING THE CANARY

for indications of poisonous coal gas. Reserves testing the air of a mine after an explosion

The elevator used for hoisting in the mine shaft is called a "cage." After the mine cars reach the surface they pass upon an elevated structure called the "tipple." This is generally the most conspicuous feature of a mining property above ground, and provides facilities for screening and otherwise "preparing" the coal as it passes down chutes to the railway cars underneath. The more elaborate structure used for anthracite is called a "breaker"; it includes machinery for crushing the coal and arrangements for removing "slate" and other waste rock by hand picking or otherwise.

Courtesy U. S. Bureau of Mines

MEMBERS OF RESCUE TEAM

Showing apparatus worn on entering mines after explosions. This device sustains a man for two hours

Coal mining in this country gives employment to an army of 765,000 men. The word "army" has a sinister appropriateness in this connection, since out of every thousand men employed in the industry three are killed and one hundred and eighty injured annually.

The World's Coal Resources

In order of output, the leading coal-producing countries of the world are: United States, Great Britain, Germany, Austria-Hungary, France, Russia, Belgium,

Japan, China, India, and Canada. The total production during the latest year for which data are available was about 1,346,000,000 tons.

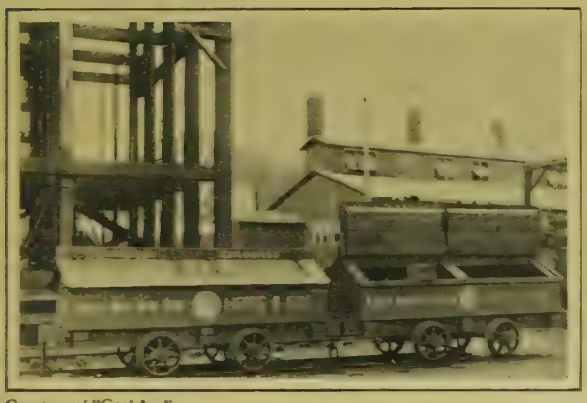
How long will the world's coal supply last? This is a question to which various answers have been given. Geologists are able to furnish a rough estimate of the amount of coal now in the ground and near enough to the surface to be mined; but with the growth of the world's industries the demand for coal is increasing by leaps and bounds, and nobody can safely predict how much will be needed at any future time.

Press Illustrating Service

SAFETY DEVICE IN COAL BUNKER

In case of a "coal slide," a man may be pulled out before he is buried and stifled

The world's "coal reserves"—that is, the amount of coal remaining unmined—are estimated at 8,154,322,500,000 tons. In the United States it is estimated that we have used only four-tenths of one per cent. of our available coal supply. At the *present* rate of consumption the coal in this country would last about 4,000 years; but if the present rate of *increase* in consumption should be maintained, it would last only 100 years!



Courtesy of "Coal Age"

CARS FOR CARRYING EXPLOSIVES INTO MINES

Fortunately for posterity there are sources of heat, light and power which are not, like the fuels, exhaustible. Water-power, for example, is a permanent asset, and there are other inexhaustible sources of energy, such as solar heat and the internal heat of the earth, which Man's ingenuity will some day turn to good account.

SUPPLEMENTARY READING

COAL CATECHISM *By W. J. Nicholls*

THE STORY OF AMERICAN COALS *By W. J. Nicholls*

A YEAR IN A COAL MINE *By Joseph Husband*

YEAR BOOK OF THE U. S. BUREAU OF MINES

STORY OF A PIECE OF COAL *By E. A. Martin*

THE COAL FIELDS OF THE UNITED STATES (U. S. Geological Survey, Professional Paper 100) *By M. R. Campbell*

***Information concerning these books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

Coal is "a burning question," that has to be met and answered every day. It supplies heat, light and power—and a thousand and one useful by-products—and it is an ever-present, ever-fruitful subject of public and private discussion. We average folk know something of the varied uses of coal in the big affairs of the world, but we know it more intimately and vitally in the forms in which it ministers to our own personal welfare. Coal, in our everyday—and night—life, means heat and light. It means home comfort—and if this "coal comfort" is denied us, or even curtailed, we raise an immediate and mighty outcry. And why not? The health of a community can be fatally affected by a few heatless days. The experience of the past winter has shown us how dependent we are on fuel, not only for luxury and comfort, but for life itself.

★ ★ ★

Why do we need so much heat? Many of the peoples of the earth get along comfortably with much less heat than we consider necessary. Europeans and South Americans call us a "steam-heated nation." Why do we have to surrender so completely and abjectly to the domination of Old King Coal? It is true, as Owen Meredith said: "Civilized man cannot live without cooks"; and light is all important in turning night hours to advantage; but why must we be so warm? Humanity was not created in a warm room, nor was the human race nurtured, in its infancy, by a coal fire or a gas stove. Primitive man was his own heater. He had to *discover* fire, and then exploit its uses. He was originally supplied by nature with a warm body, and he now finds artificial ways of making it warmer. Has not civilization pampered us to a point that has impaired our original heat-giving resources and substituted a forced warmth that has enervated us? The doctors tell us that many diseases come out of artificial heat—indoor diseases, they might be called—the diseases that are treated, and sometimes cured today, by foregoing artificial heat and going back to nature.

★ ★ ★

Does this mean that I suggest reverting to primitive conditions and giving up heat? No, indeed. I suffered enough last winter. I do not advocate giving up heat—suddenly. But letting up gradually on artificial heat, I do most earnestly advocate. Most of us live an overheated existence—to the depletion of our health. The steam pipe, like a huge python, is closing its coils about us, and gradually stifling our native vital resources.

★ ★ ★

On the coldest days of winter a white-haired man, nearly seventy years of age, may be seen walking New York streets, without a hat, clad only in light "Palm Beach" trousers, and a silk negligée shirt, open at the throat. "He is crazy," you say. "Perhaps," I answer, "but at any rate he is healthy—and immune from cold." Heatless days mean nothing to him. On a raw, drizzling day in November last a slender man was playing golf in a light woolen suit. A companion player, weighing over 200 pounds, full blooded and hearty in appearance, and bundled up in two heavy sweaters, asked the lightly clad player if he was not afraid of catching a fatal cold. "No," he answered, "*you* are the one that gives me concern. If I had your clothing on I would be a sick man. *I am not healthy enough* to wear all those things."

★ ★ ★

Which means that we would be better off in health if we could accustom ourselves to less heat; if we could live as the people of some other nations do—comfortable and content with heat enough to take the chill off the air, and not demanding that we shall be "kept going" by means of artificial heat outside of our own natural heat-giving apparatus. We make caloric cripples of ourselves by giving crutches to nature in the form of roaring furnaces and hissing steam pipes. Fresh cold air is better for us than hot air—in winter as well as in summer. Would it not be worth while to form a national Fresh Air Fraternity, based on the principle of foregoing artificial heat and developing the original body caloric? We would then leave artificial heat largely to infants, weaklings and invalids; we would abolish several diseases altogether, improve the mortality rate, and be healthy, happy and vigorous. Incidentally, too, we would have more coal for cooking and other really necessary purposes.

W. D. Moffat

THE YOUNG BENJAMIN FRANKLIN, 1723

ONE

BENJAMIN FRANKLIN, born in Boston, Massachusetts, January 17, 1706 (January 6, Old Style), of humble parents, was one of the heroes of the War of Independence, one of the cleverest of American diplomats, and one of the greatest American politicians and statesmen. But this was not all: he possessed so many talents that he can only be described properly as a universal genius.

Franklin's life is one huge catalogue of performances, hard indeed to tabulate, for he went from one thing to another with remarkable rapidity and excelled in everything that he undertook. A recital of his accomplishments sounds like a round of the old counting game, "Doctor, lawyer, merchant, chief." He was, in fact, all the list but the "thief"—even the "beggarman."

Franklin's father, Josiah Franklin, a candle maker, intended that his son should enter the ministry of the Puritan Church, and with this idea sent him, when eight years old, to the Boston Grammar School. A year of this was too much for the slender means of the father, so Benjamin was sent to George Brownell for instruction. A year of this and Franklin's school days were ended. He worked in his father's shop for a time, and then apprenticed himself to his brother James, a printer.

While engaged in the printing business (and this did not merely consist of setting type and printing books, but in writing articles for his paper and also many political pamphlets that prepared the way for his future career), he was clerk of the General Assembly in 1736 (holding this office until 1751); postmaster in Philadelphia in 1737; and, after he gave up the post of clerk of the General Assembly, a member of that body for thirteen years (1751–1764). His activity in public affairs was enormous: he organized the first police and fire company in Philadelphia; established an academy which became the University of Pennsylvania; organized an important debating club—the Junto (1727); took the lead in improving the paving of the city; developed the lighting of the streets; organized a militia force; founded a city hospital, and in every way concerned himself with the bettering of conditions, both civic and political. He undertook to provide Braddock with horses and wagons for the march against Fort Duquesne, and, in 1756, he had charge of the Northwest frontier for a month, during which he erected blockhouses and watched the wily Indians.

In 1757, he was sent to London as agent for the people to petition the Crown. He returned home in 1762, expecting to settle down and devote the remainder of his life to scientific investigation and the pleasures of the pen. He brought with him many degrees and honors, and he thought that his public life was over. In two years' time, however, he was again sent to England as agent to settle questions in relation to taxation, and represented not only Pennsylvania, but New Jersey, Georgia, and Massachusetts. He remained until 1775, and was, therefore, in England during all the stormy days of the Stamp Act. On the day after his return he was elected to the Continental Congress, and was one of the committee of five to draw up the Declaration of Independence. On September 26, 1776, he was chosen commissioner to France with Arthur Lee and Silas Deane, and arrived in Paris on December 22, 1776, after a perilous passage, to be welcomed like a hero. On October 28, 1776, he was appointed sole plenipotentiary to the Court of France. In 1781, he was appointed one of a commission to make peace with Great Britain. He returned to Philadelphia in 1785, having made commercial treaties with Sweden (1783) and Prussia (1785).

Even then, Franklin's work was not finished. He was elected a member of the municipal council of Philadelphia, and was made a delegate to the Convention that drew up the Federal Constitution. It is interesting, also, to note that he signed a petition to Congress, in 1790, to abolish slavery. He died in Philadelphia on April 17, 1790, aged eighty-four.

These extraordinary activities, including those of a politician, diplomat, philanthropist, civic reformer, philosopher, scientist, printer, and author, covered a period of sixty years. And in between all these separate careers, as we might call them, we find stray hours filled with delightful pursuits and such pleasant diversions as studies in the realm of music, improving the musical glasses, and buying Bow, Worcester, and Chelsea china of the newest fashion. Moreover, Franklin always found time to write beautifully and to enjoy social pleasures.

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THE MATURE BENJAMIN FRANKLIN, 1777

BENJAMIN FRANKLIN was the first distinguished American "self-made man." He took himself in hand at an early age, and with only two years schooling, educated himself so that he became a man of science, a man of letters, a philosopher, a statesman and a diplomat, and acquired a fortune besides. And not only was he all of these things, more than creditably, but he took rank among the greatest minds of the highly educated and scientific Eighteenth Century. This was a period of original investigation: much "new thought" of all kinds was coming into the world, and Franklin's mind was exactly the type of mind that was characteristic of this age—particularly in France. Apart from his genial personality and his talent for always doing the right thing and the popular thing socially, his scientific and philosophical tastes were precisely those in fashion in France.

How did this man attain to such power and eminence? At twenty-three he was half-educated and crude. At forty he was known as one of the most famous scientists of the day and a brilliant writer; and before he was fifty he had received the Copley medal from the Royal Society; the freedom of the City of Edinburgh; LL.D. from the University of St. Andrews; degrees from Harvard, Yale, and William and Mary; and, in 1762, D.C.L. from Oxford.

What were the characteristics and the tastes, and what was the disposition and the appearance of the extraordinary personage who accomplished all these things? These are questions that are naturally asked.

We never think of Franklin in his youth. We picture him according to the Duplessis (dew-ples'-see) portrait painted in Paris when he was seventy-two; or, according to the old prints that show him wearing the familiar old fur cap and the heavy-rimmed spectacles. Franklin was rather tall (about five feet ten inches), corpulent and heavy, with rounded shoulders. He was a good swimmer; he was muscular and strong, and he was a believer in vegetarianism and air-baths. In late years he suffered from gout in his foot, and wrote in Paris a humorous dialogue from which we get a very good idea of the old gentleman's habits and tastes. On his appeal to Gout to spare him, his persecutor exclaims: "Not a jot; your rhetoric and your politeness are thrown away; your apology avails nothing. If your situation in life is a sedentary one, your amusements, your recreations, at least, should be active. You ought to walk or ride; or, if the weather prevents that, play at billiards. But let us examine your course of life. While the mornings are long and you have leisure to go abroad, what do you do? Why, instead of gaining an appetite for breakfast by salutary exercise, you amuse yourself with books, pamphlets, or newspapers, which commonly are not worth the reading. Yet you eat an inordinate breakfast, four dishes of tea with cream, and one or two buttered toasts, with slices of hung beef, which I fancy are not things the most easily digested. Immediately afterwards you sit down to write at your desk, or converse with persons who apply to you on business. Thus the time passes till one, without any kind of bodily exercise. But all this I could pardon, in regard, as you say, to your sedentary condition. But what is your practice after dinner? Walking in the beautiful garden of those friends with whom you have dined, would be the choice of men of sense; yours is to be fixed down to chess, where you are found engaged for two or three hours!"

But notwithstanding his sedentary life and his gout and his other maladies, Franklin lived to be eighty-four, preserving his extraordinary brightness and gayety to the last. His mental faculties were unimpaired, his face was fresh and serene, and his spirits were buoyant.

This charming vivacity and this play and sparkle of mind greatly contributed towards making Franklin so beloved of the French. His life in Paris was the happiest of his whole career. He was very social, and he therefore enjoyed the Parisian garden parties and dinners, the attractive women, and the literary, scientific and philosophical men. He left France with reluctance, saying he could never forget the years of happiness that he had spent "in the sweet society of a people whose conversation is instructive, whose manners are highly pleasing, and who, above all the nations in the world, have, in the greatest perfection, the art of making themselves beloved by strangers."

Franklin had a great talent for making friends; and one of the greatest pleasures of his life was the enjoyment of his children and grandchildren. He was always ready with a witty retort, and he loved a joke and a hearty laugh. In fact, nothing seemed too large or too small for Benjamin Franklin.

Regarding religion, he early revolted against New England Puritanism and went through various stages of belief; but in his old age he had faith in the immortality of the soul. His tolerance led John Adams to say: "The Catholics thought him a Catholic. The Church of England claimed him. The Presbyterians thought him half a Presbyterian, and Friends believed him a wet Quaker." Of his morals he has himself written, and he prepared a moral code with comments.

Intellectual, practical, industrious, capable and genial, combining so many qualities in one mind and with a vast amount of public work achieved, Franklin remains a puzzle, for he seems to have had abundant time to enjoy those social talents which amounted to genius.

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FROM AN ENGRAVING BY ROBERT WHITECHURCH FROM THE PAINTING BY C. SCHUSSELE

FRANKLIN BEFORE THE LORDS IN COUNCIL, WHITEHALL CHAPEL, LONDON, 1774

THREE

FRANKLIN prepared himself unconsciously for political life even in his boyhood, when he wrote articles for his brother's newspaper attacking the established religious and political system of Massachusetts. In the paper that he established when he was but twenty-three—the *Pennsylvania Gazette*—he handled the questions of the day in masterly fashion. About this time he published a pamphlet in favor of paper money, which shows how early his mind was directed towards large questions concerning the government. When he joined the Pennsylvania Assembly, he became a leader of the Quaker majority; and, to represent the interests of the Colony, he was sent as commissioner, or agent, to England. He remained there for five years, returning to Philadelphia in 1762, only to stay at home until 1764, when he was sent on his second mission to England. This time he remained for ten years. The period covered the exciting agitations regarding the Stamp Act, its passage, its repeal, and all the tumultuous proceedings that finally led to the Revolution.

Franklin's composure during the ordeal of Parliamentary investigation, his witty replies, and his brilliant evasions to embarrassing questions greatly enhanced his reputation. His clever satirical essays, published in separate pamphlets, were widely circulated. During this period of activity Franklin lived in Craven Street, London, pursued his scientific studies, was appointed on committees to put lightning-rods on St. Paul's Cathedral and the government's powder magazines, attended meetings of various scientific and learned societies and clubs of which he was a member, was entertained by the nobility, and knew everybody of distinction in the political, scientific, artistic, and literary worlds.

Returning home, he was made one of the deputies to the Continental Congress, which met in Philadelphia, and was also a member of the Pennsylvania Legislature, and a member of the Committee of Safety to prepare the defenses of the province.

His most important work was yet to come. In September, 1776, he was appointed, by vote of Congress, the agent to represent in France the united Colonies, which had just declared their independence of Great Britain. Accordingly, he left Philadelphia and arrived in France in December.

In our infancy of diplomatic service the old gentleman of seventy was banker, merchant, judge of admiralty, consul, director of the navy, ambassador to France, and negotiator with England for the exchange of prisoners and for peace. He accomplished his mission with such success that he was the idol of the French nation. Franklin was liked by the French for his social qualities, his scientific accomplishments, his philosophical mind, and his humorous and satirical writings. Moreover, he was worshiped as the personification of *liberty*.

His mission in France ended in 1785.

The last important work of his life was helping to frame the national document that took the place of the Articles of Confederation; and his plan regarding representation in Congress was the one adopted.

The most active period of his life, as he himself has told us, was between his seventieth and his eightieth years. If any statesman ever deserved the name of "grand old man," it certainly was Benjamin Franklin.

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FRANKLIN DRAWING ELECTRICITY FROM THE SKY

ONE of the stories that has always charmed schoolchildren is that of Dr. Franklin and his kite; and the quaint little illustration that appeared in Franklin's lifetime, and that was printed by him hundreds of times over, is still reproduced in the accounts of this experiment. It was not until 1746, or 1747, after Franklin had been making original researches in science for about five years, that he took up the subject of electricity. Franklin was then forty-one years old. The subject was literally "in the air." Peter Collinson, of London, had presented to the Philadelphia Library one of the new glass tubes that was rubbed with silk or skin to produce electricity. Franklin began at once to experiment with this tube, and people came in crowds to see his performances. Thomas Hopkinson and Philip Syng, who experimented with him, discovered electrical fire, and invented an electrical machine for producing the electrical spark. Franklin discovered what is now known as "positive" and "negative" electricity. He also attempted to explain, in his letters to Collinson, thunder and lightning as phenomena of electricity; and, in 1759, sent him a paper announcing his invention of the lightning-rod, and an explanation of its purpose and action. He also suggested an experiment that would prove that lightning was a form of electricity; and to show that lightning was attracted by points he proposed that a man should stand on a tall steeple, or tower, with a pointed rod and draw electricity from the thunder-clouds. The experiment was tried in France and England, and Franklin was proclaimed the discoverer of the identity of lightning with electricity. Some of the scientists used a tall metal rod. Franklin now thought of the kite experiment, because there were no steeples in Philadelphia tall enough. To an ordinary kite covered with silk he fixed a sharp, pointed wire, rising about a foot above the frame of the kite. To the end of the twine next the hand a silk ribbon was tied; and where the silk and twine joined a key was fastened. When the thunder clouds passed over the kite, the pointed wire drew the electric fire from them, and down the string to the key, from which electric fire was obtained. This experiment was made in 1752; and the news, as contained in Franklin's simple letter to Mr. Collinson, spread over the world, and with various theatrical embellishments in the telling.

"Franklin," writes one of his biographers, "cannot be ranked among the great men of science, the Newtons, the Keplers, or the Humboldts, Huxleys or Darwins. He belongs, rather, in the second class, among the minor discoverers. But his discovery of the nature of lightning was so striking and so capable of arousing the wonder of the masses of mankind and his invention of the lightning rod was regarded as so valuable that he has received more popular applause than men whose achievements were greater and more important. His command of language had seldom been put to better use than in explaining the rather subtle ideas and conceptions in the early development of electricity. Even now, after the lapse of one hundred and fifty years, we seem to gain a fresher understanding of that subject by reading his homely and beautiful explanations; and modern students would have an easier time if Franklin were still here to write their text-books."

Public business and long years of diplomatic service interrupted the original study of science to a great extent; but even so, in England, in France, and in the closing years of his life in Philadelphia, Franklin found time, now and then, to devote to that loving investigation of Nature, which, after his thirtieth year, became the great passion of his life.

Everything in the way of scientific research fascinated him: he investigated earthquakes, eclipses, storms, winds, the science of sound, the laws of hot air and its movements, ventilation, water-spouts, phosphorescence ("light in sea-water," he called it), the cause of saltiness in the sea, the Gulf Stream, rainfall, evaporation, the aurora borealis, light, heat, the daily motion of the earth, and many other subjects. He studied music as a science, and invented a new kind of musical glasses (fashionable at that time) called "Armonica." He studied political economy in a scientific way, and was so interested in agriculture that he tried experiments on his New Jersey farm. He also invented the "Pennsylvania fireplace" and the "Franklin" stove. Though his scientific writings are numerous, they are in the form of essays and letters. His investigations and experiments were thus made known to the world in letters to friends in France and England; for, as there were no scientific periodicals in those days, men of learning kept up a lively correspondence and occasionally issued a pamphlet.

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DRAFTING THE DECLARATION OF INDEPENDENCE—FRANKLIN, JEFFERSON, ADAMS, LIVINGSTON, SHERMAN

FRANKLIN was a master of style. He had what critics call "a light touch"; and he had the rare faculty of making any subject interesting. He even wrote charmingly about stoves! How did he acquire this wonderful skill, this clear and beautiful language which dropped so easily from his pen, however dry the theme?

No matter what essay, what letter, what political pamphlet, or what year of "Poor Richard" we may pick up, we are always held by Franklin's magic personality. His "Autobiography" is considered one of the greatest works of its kind ever written.

A careful study of the third volume of Addison's "Spectator," and experimenting with it in various ways, seems to have been the beginning of Franklin's literary education. It was a queer task for a young boy—particularly one of an uncultured family—to impose upon himself; but he tells us that he was encouraged, for, "I thought I might possibly in time come to be a tolerable English writer, of which I was extremely ambitious."

Moreover, he fed himself on the best literature; and this, too, was extraordinary for a boy in his position. Some of his early essays, published in pamphlet form, have very dry titles. "A Dissertation on Liberty, Necessity, and Pain," and "A Modest Inquiry into the Nature and Necessity of Paper Currency" are hardly alluring; but these papers are full of shrewd reasoning and common sense—qualities that are conspicuous in all his future writings. Franklin's newspaper articles were a splendid preparation for his political work.

Franklin was very fond of paraphrasing the Bible in a humorous way, and fond of hoaxes, like the "Edict of the King of Prussia," in which he made Frederick the Great claim a right to the Kingdom of Great Britain, because the British Isles were originally Anglo-Saxon colonies; and, having reached a flourishing condition, deserved to be levied upon. Franklin greatly enjoyed seeing the English take this seriously. It was copied widely. So was another satire of 1773, called "Rules for Reducing a Great Empire to a Small One," descriptive of the British government.

While in France his pen was always busy. Many of his letters were practically essays. For Madame Brillon the "Ephemera," the "Morals of Chess," "Dialogue between Franklin and the Gout," "Story of the Whistle," and "Petition of the Left Hand" were written.

Franklin's letters, so numerous and so witty, cover all periods of his life. His electrical experiments and theories were all announced in this form. His letters written home from England before the Revolution are delightful reading.

"Poor Richard" was a real creation. The character made Franklin known in England and France before he lived in those countries. "It was quite common a hundred years ago," writes a biographer, "to charge Franklin with being a plagiarist. It is true that the sayings of 'Poor Richard,' and a great deal that went to make up the almanac, were taken from Rabelais, Bacon, Rochefoucault, Roy Palmer, and others. But 'Poor Richard' changed and re-wrote them to suit his purpose, and gave most of them a far wider circulation than they had before."

"There is no little enemy"; "Keep your eyes wide open before marriage, half-shut afterwards;" "Lend money to an enemy, and thou'lt gain him; to a friend and 'thou'lt lose him"; "Necessity never made a good bargain"; "A word to the wise is enough"; "God helps those that help themselves"; "The sleeping fox catches no poultry"; "Drive thy business, let that not drive thee"; "Early to bed and early to rise makes a man healthy, wealthy, and wise"; "Experience keeps a dear school, but fools will learn in no other"—are some of Poor Richard's proverbs that have passed into our everyday speech.

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FRANKLIN AT THE COURT OF FRANCE, 1778—SEATED FIGURES ARE LOUIS XVI AND MARIE ANTOINETTE

self-government; Franklin was the man who went far to convince the world that Americans were capable of carrying on their government after they got it. Besides his reputation as the greatest American writer of his time, and the most renowned scientific man, he gained and deserved the repute of being a main supporting pillar of the new United States of America.

BENJAMIN FRANKLIN'S BIRTHPLACE
It stood on Milk Street, Boston, until destroyed by fire in 1810

Franklin in Massachusetts

In a time when most Americans passed their lives within the borders of their own colony, Franklin was a citizen of two colonies, and an official of four. He honored Massachusetts by being born in Boston in 1706, the son of an emigrant, like millions after him—his father being of English birth. Benjamin was a human kind of boy, eager to run away to sea; went to the kind of school kept by a school-master only two years of his life; educated himself on a mixed diet of John Bunyan, "Plutarch's Lives" and the "Spectator"; became a kind of printer's devil to his brother James; and early got into trouble through incautious writing for the newspapers. At seventeen the graceless youth ran away from home. Yet he came back four times to visit Boston, and toward the end of his life wrote, "I long much to see again my native place and to lay my bones there—my best wishes attend my dear country."

THE SO-CALLED "VERSAILLES" PORTRAIT OF FRANKLIN
From an engraving by Levy, owned by Clarence W. Bowen, Brooklyn, N. Y.

Franklin as a Pennsylvanian

On his arrival in Philadelphia in 1723, Benjamin Franklin began to make himself a commonwealth builder, and for more than thirty years he was one of the motive forces in that colony. From the first he found himself more at home in Philadelphia than in Boston. A man never overdisposed to self-denial, he enjoyed the comfort, the good dinners, the pleasant associations, the building up of social forces. Still, at that time Franklin had a much greater interest in Benjamin Franklin than in the community around him. He even showed the unusual enterprise of going abroad in 1725, a practice commonly reserved for wealthy Colonials who wanted to spend their money like gentlemen.

Returning in 1727, he, first of all, laid the foundations of a printing business large and profitable for the time. In 1729, then only twenty-three years old, he started a newspaper for himself, which speedily made him a force in the community. Once launched as a publisher, Franklin extended his ventures more and more widely; and in 1740 he founded a *General Magazine*, and was one of the first Americans to discover how much money can be sunk in a literary periodical and in how short a time.

In 1732, he began the most popular and the most effective of all his publications—*Poor Richard's Almanac*, an annual which sold the incredible number of ten thousand a year, and which applied the sagacity and humor of the writer to setting forth a standard of morals, which, however utilitarian and self-seeking, had a powerful influence upon a crude and growing people. Indeed, it is almost the only bit of American literature that circulated throughout the Colonies and infused a national spirit into the half century preceding the Revolution.

MRS. BENJAMIN FRANKLIN

Born Deborah Reed. From a portrait painted by Matthew Pratt, and now owned by the Rev. F. B. Hodge, Wilkesbarre, Pa.

Once established as a man of property and influence, Franklin bent his energies to setting up a new standard of education. In 1743, he issued proposals for an academy of learning, and in 1744 founded the American Philosophical Society. In 1749, he raised the great sum of five thousand pounds for the new school, and secured an excellent building for it. This far-reaching plan also included a "Free School—for the Instruction of Poor Children in Reading, Writing and Arithmetic"—apparently the first suggestion of a free school in his commonwealth. In 1755, his school developed into a college which subsequently became the University of Pennsylvania. No man in America had such solid and thorough-going views as to the value of education.

FRANKLIN GIVING PART OF HIS BREAD TO A POOR WOMAN

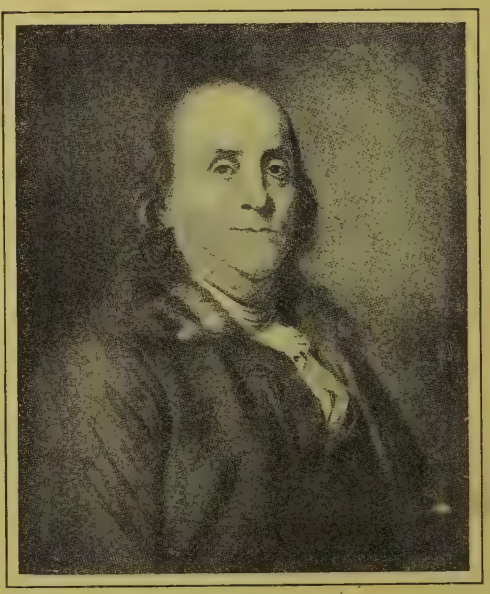
Philadelphia, 1723

As has been the case with many journalists, his calling speedily brought him into political relations, for he was chosen to be the official printer of the Colonial legislature; and thereafter for fifty-nine years was seldom out of some form of public employment. Thus established as a kind of public character, Franklin set himself to improve both city and Colonial governments.

In 1737, he was made post-

master of Philadelphia, and caused great surprise by his prompt and accurate financial accounts.

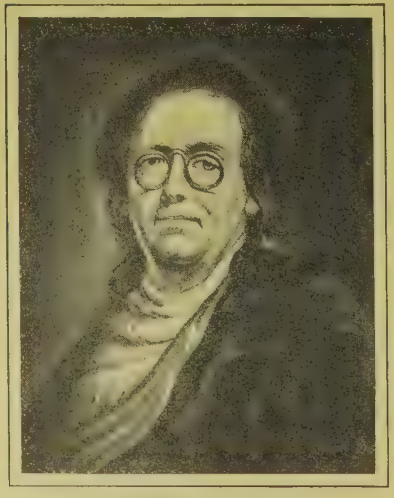
Benjamin Franklin also organized himself into the first Good Government Club on record. Backed by at least half the press of the city (for he owned one of the two newspapers), and unanimously supported by the postmaster, he demanded a regeneration of the city. Eventually, he succeeded in dispossessing the old constables, who served in rotation, and in securing a police force, paid for that special service. He organized a fire company, which not only operated its hand engine when necessary, but carried materials for covering and protecting goods. He was also the first of many exasperated persons to criticize the Philadelphia pavements.



DR. BENJAMIN FRANKLIN

From a painting by Duplessis in 1778. The original, in the Academy of Fine Arts, Philadelphia, is believed to be the best likeness of Franklin

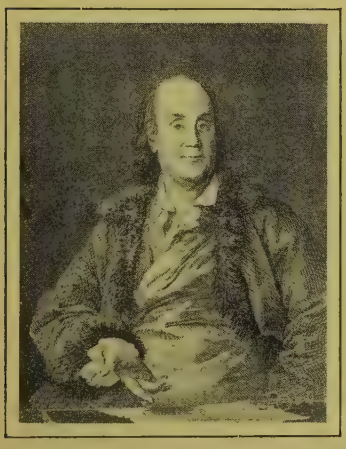
When later elected member of the Common Council, and then an Alderman and also a local Justice of Peace, Franklin, like some other good Philadelphia citizens, became rather apathetic. Nevertheless, these honors were not unwelcome, for he said of himself: "I shall never *Ask*, never *Refuse*, nor ever *Resign* an office." By this time Franklin was involved in the public life of the colony. In 1736, he obtained the office of clerk to the General Assembly, which he continued to hold for many years.



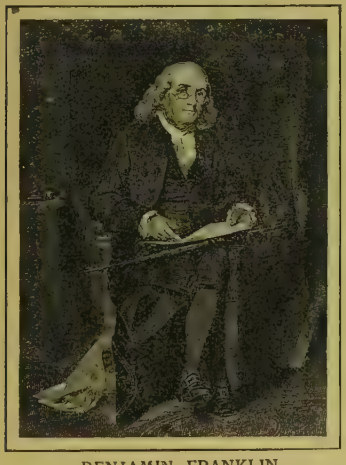
PORTRAIT OF FRANKLIN

Owned by H. C. Thompson, Philadelphia

Colonial affairs became especially important when war broke out with France and Spain in 1744. The Quakers were then the great problem in the Pennsylvania government, since their principles forbade them to fight, or even to vote money for military purposes. Franklin relates that by a judicious application of Madeira wine to the gullet of Governor Clinton of New York, he borrowed eighteen cannon for the defense of Philadelphia. He did more. He so aroused the Quakers that although they refused to authorize the purchase of powder for the army, "because that was an ingredient of war," they voted an aid to New England of three thousand pounds to be put into the hands



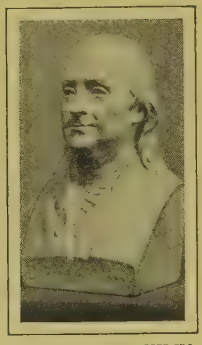
ANOTHER DUPLESSIS PORTRAIT OF FRANKLIN



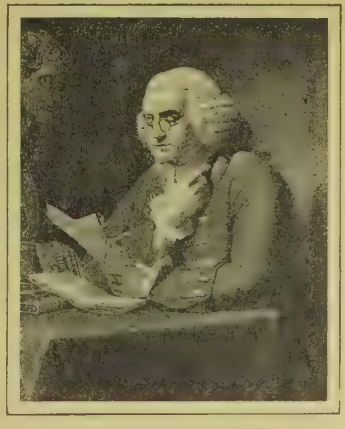
BENJAMIN FRANKLIN
From the original painting by Chappel

of the Governor, and appropriated it "for the purchase of bread, flour, wheat or other grain." The Governor accepted with the remark, "I shall take the money, for I understand very well their meaning; *other grain* is gunpowder." Franklin himself suggested that the Quakers be importuned to permit the purchase of a fire engine; and then, said he, "we will buy a great gun, which is certainly a *fire engine*."

From his position of political and intellectual influence in Pennsylvania, Franklin easily passed into the larger field of general Colonial policies and public service. In 1754, he was made one of the commissioners to a joint congress of seven colonies, which met at Albany; from beginning to end of that meeting he was the leading spirit, and he prepared what is practically the first plan for a Federal Constitution. This was to include a Grand Council, which is the earliest suggestion of a national legislature. The Congress of Albany liked the plan and approved it, but the home government frowned upon it, and Franklin records that "the Assemblies did not adopt it, as they all thought there was too much prerogative in it; and in England it was judged to have too much of the democratic." Franklin called to mind the Confederation of the Iroquois and marveled that the "Six Nations of ignorant slaves* should be capable of forming a scheme for such a union and be able to execute it in such a manner, so that it has subsisted for ages, and appears indissoluble; and yet that a like union should be impracticable for ten or a dozen English colonies."



BUST OF FRANKLIN
By P. J. Chartigny
In the Metropolitan Museum of Art, New York



BENJAMIN FRANKLIN
From the portrait by Martin, painted in England in 1765

In the war that followed, Franklin showed himself almost the only vigorous administrator. He was the man who found the wagons necessary for Braddock's expedition, he was even chosen colonel of a militia regiment. Then, in

*The word "slaves" is no doubt used here in the sense of "savages."

1757, he was sent by the Pennsylvania Assembly to be the agent of the Colony in England, and thus entered on a new and important career.

FRANKLIN MONUMENT IN NEW ORLEANS

Many Englishmen found their way to the American Colonies and made reputations there. Franklin was one of the few Americans that became renowned in England. For years he stood for the thought that Englishmen in Great Britain and the Colonies were alike citizens of a common Anglo-Saxon empire, which might look forward to a glorious future. He even ventured to assert that "the foundations of the future grandeur and stability of the British empire lie in America."

STATUETTE OF FRANKLIN
White metal. French, nineteenth century. Metropolitan Museum of Art

The English government bestowed upon him the important post of deputy-postmaster-general for the Colonies. He so impressed the men of learning that he received doctorates of law from the universities of St. Andrews, Oxford, and Edinburgh. Yet his public functions were the lesser part of his influence; he found friends everywhere, and by his personal relations with ministers and private persons affected the minds of the British. The colonies of Georgia, New Jersey, and Massachusetts also designated him as their agent, and his various public offices brought him in the large income for that time of fifteen hundred pounds a year.

STATUE OF FRANKLIN, NEW YORK
Designed by E. Classman

When the question of the Stamp Act arose in 1766, Franklin appeared before the House of Commons to protest, and in his examination occurred the famous passage:

"Question—'Can anything less than a military force carry the Stamp Act into execution?'

"Answer—'I do not see how a military force could be applied to that purpose.'

"Question—'Why may it not?'

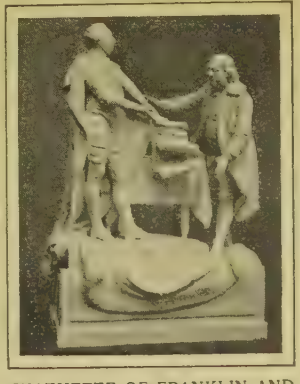
"Answer—'Suppose a military force be sent into America, they will find nobody in arms; what are they then to do? They cannot force a man to take stamps who chooses to do without them. They will not find a rebellion; they will indeed make one.'"

Franklin's position had great weight in bringing about the repeal of the Stamp Act; and thereafter he strove with all his might to prevent the breaking up of the empire. When the storm broke in 1775, Franklin needed to make no choice. An American through and through, he never thought of anything but casting his lot with that of his countrymen; and on March 21, 1775, he left England, and became an original Son of the American Revolution. The conditions have never been better set forth than in his own words: "And now the affair is nearly in the situation of Friar Bacon's project of making a brazen wall round England for its eternal security. His servant, Friar Bungey, slept while the brazen head, which was to dictate how it may be done, said, '*Time* is and *Time* was.' He only waked to hear it say, '*Time is past.*'"

BENJAMIN FRANKLIN
By Boyle
This statue stands at Ninth and Chestnut Streets, Philadelphia, close to the spot where Franklin first drew electricity from the sky

Franklin in the Revolution

When Franklin arrived at Philadelphia, May 5th, he found himself at once a member and a leader in a body of men who, without any legal mandate, were called upon to create, to organize, and to defend the United States. The day after Franklin's arrival in America he was designated by Pennsylvania as a member of the Continental Congress which was to meet shortly. A few days later he was elected a member of the Pennsylvania Colonial Assembly. The next year he was chosen member and president of the State Constitutional Convention; and in 1776, he was appointed envoy of the United States to France. Besides these dignities, in that year and a half, he was one of the half dozen men who



STATUETTE OF FRANKLIN AND LOUIS XVI.
French porcelain. Metropolitan Musem of Art

designated the framework of the future state and national governments of America.

July 21, 1775, Franklin formally presented to Congress a skilful plan for a federal government, which was the foundation stone of the present Federal Constitution. It contains some things out of the Albany plan of 1754; and had it been adopted as it stood, would have been a better instrument of government than was later drawn up by Congress. Franklin proposed and urged a strong, vigorous and well-knit union. He was also a member of the committee to draw up the Declaration of Independence in 1776. His principal contribution to the discussion was his famous retort when somebody said, "We must all hang together"—"Yes, we must all hang together, or we shall all hang separately." Franklin took an honorable part in the Pennsylvania Constitutional Convention of 1776, and to him was due the fine phrase in the Pennsylvania Bill of Rights, "That all men have a natural and inalienable right to worship Almighty God according to the dictates of their own consciences and understanding."

THREE PLATES BEARING PORTRAITS OF FRANKLIN
Made by Veuve Perrin, Marseilles, France, late in the eighteenth century. Metropolitan Museum of Art

FRENCH PLAQUE
After Cochin by Dupont. Metropolitan Museum of Art

Franklin as a Diplomat

Benjamin Franklin was now seventy years old, and said of himself to a fellow member of Congress, "I am old and good for nothing; but as the storekeepers say of their remnants of cloth, I am but a fag end, and you may have me for what you please to give." Yet he accepted the most important post of his life when in September, 1776, he was elected commissioner to France. There for nine years he served his country as the most popular, most sagacious, and most successful foreign minister ever appointed by the United States.

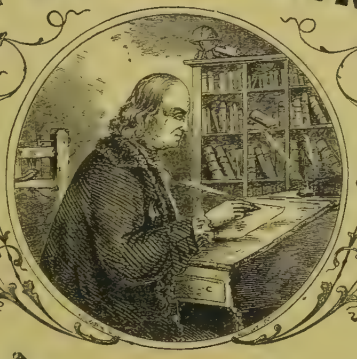
HEAD OF FRANKLIN
Nineteenth-century, French tortoise-shell snuff-box. Metropolitan Museum of Art

He was not merely a diplomatic representative; he was a commercial and financial agent, fitted out vessels, issued commissions, borrowed money. Well did Horace Walpole say of him that Franklin was

THE ART OF MAKING MONEY PLENTY

IN EVERY MAN'S POCKET; BY

Doctor Franklin



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Now thereby emb these and Happy. B Franklin

ONE OF FRANKLIN'S INGENIOUS DEVICES FOR TEACHING THE LESSONS OF PRACTICAL WISDOM

furnishing materials for writing the History of the Decline of the British Empire. Without Franklin the two treaties of 1778 with France could not have been obtained. By his personal relations with Englishmen of note, he was the natural starting point for overtures of concord; and in the negotiations of the peace of 1782 he stood alongside the eager, impetuous, and hotly national John Adams, and courteous, high bred and determined John Jay, as chief of that remarkable triumvirate of negotiators.

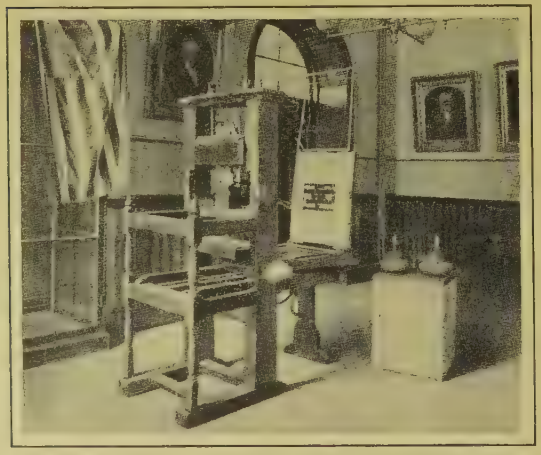
After all, Franklin's chief service abroad was not so much the obtaining of favorable terms as the maintaining of American character. Who could deny the right to be a nation to a people whose best aspirations were typified by this shrewd, hard-headed, kindly man, a gallant among the fashionables, a philosopher among scientists, a statesman among ministers, a man among men?

FRANKLIN TEARS THE LIGHTNING FROM THE SKY AND THE SCEPTER FROM THE TYRANTS

Seated beside him is the figure of America. From a sepia drawing by Fragonard, owned by Clarence S. Bement, Philadelphia

Franklin in the Federal Convention

At seventy-nine years of age most men expect retirement, and it was very grateful to Franklin that, on his return to America in 1785, he should almost immediately be chosen by Pennsylvania to be the president of the commonwealth. His universal popularity was shown by the people of western North Carolina (now east Tennessee), who, in 1784, set up a short-lived frontier commonwealth, to which by way of compliment they gave the name of Franklin. In 1787, Franklin readily accepted membership in the Federal Convention, as one of the Pennsylvania delegation. He was somewhat out of touch with the real difficulties of the time, and most of his suggestions were overruled, but his influence throughout was in favor of a well organized, strong central government; and he was almost the only member to introduce an element of humanity and good humor.



PRINTING PRESS AT WHICH FRANKLIN WORKED WHEN A BOY IN BOSTON

Now exhibited in the rooms of the Mechanics' Institute, Boston, Mass.

On the last day of the convention he rose to urge a spirit of

compromise, a willingness to yield something of one's own opinion; to avoid the spirit of "a certain French lady, who, in a dispute with her sister, said, 'I don't know how it happens, sister, but I meet with nobody but myself that is always in the right.'" When at the end, signatures of the members were appended, numerous enough to make it likely that the Constitution would be accepted by the people, Franklin looked at the sun painted behind the President's chair, and made a comment which is as applicable to his own reputation as it was to the new Federal Constitution. "I have often and often in the course of the session, and the vicissitudes of my hopes and fears as to its issue, looked at that sun behind the President without being able to tell whether it was rising or setting; but now at length, I have the happiness to know that it is a rising and not a setting sun."

MRS. SARAH BACHE
Daughter of Franklin

This was the end of Franklin's public life; three years later he died, full of years and honor, with the established reputation of a man of learning, power, and statesmanship. Possessed of a calm dignity that impressed even the frivolous court of France, he added a love of fun such as no other great American public man has shown, except Abraham Lincoln. His Autobiography abounds in delightful pictures of the gawky youth and the serene statesman. His vast powers belong to his country; his great endeavors went into federal government, which he helped to found, to protect, and to restate in the immortal Constitution of 1787. That is his best monument.

GRAVE OF FRANKLIN IN THE CHRIST CHURCH BURIAL GROUND, PHILADELPHIA
The stone nearest the fence covers the bodies of both Franklin and his wife

SUPPLEMENTARY READING

AUTOBIOGRAPHY OF BENJAMIN FRANKLIN, WITH NOTES BY JOHN BIGELOW.
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SELECTIONS FROM THE WRITINGS OF FRANKLIN

POOR RICHARD'S ALMANAC

BENJAMIN FRANKLIN SELF-REVEALED
By W. C. Bruce

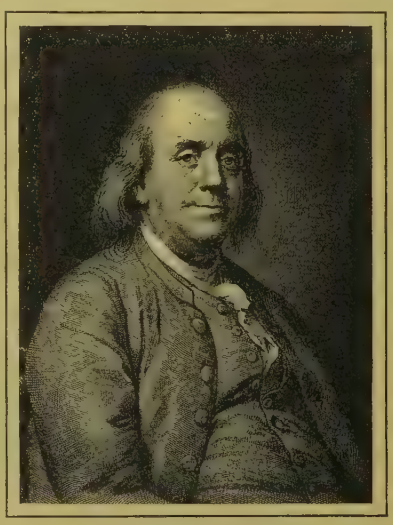
THE TRUE BENJAMIN FRANKLIN
By S. G. Fisher

SCENES FROM THE LIFE OF BENJAMIN FRANKLIN
By L. C. Holman

*** Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

Benjamin Franklin's eyes were blue-gray. How do we know this? Because Duplessis's pastel portrait in colors tells us so. Franklin had bland, shrewd, clear seeing eyes that comprehended in their genial, open glance the whole of human nature. They first saw the light of day on January 17, 1706, and they were closed for the last time on April 17, 1790. During all those years those luminous blue-gray eyes were observing life closely, studiously and intelligently, and they saw many great things come to pass—the most important being the making of a new nation. The eyes of Franklin saw Liberty in its cradle, and with earnest solicitude, watched its growth and development until it became the watchword and dominating principle of a great republic. Moreover, while witnessing these national events, and sharing actively in them, Franklin had time to look into the everyday affairs of men, to find solutions for many problems of the work-a-day world, to suggest and plan improved methods of doing things, to invent useful devices—and, with his printing establishment as a means of public expression, to give utterance to a system of practical philosophy that was a benefit and blessing to his fellow men. Franklin was the peerless Practical Man, and his writings contain the Complete Gospel of Common Sense.



BENJAMIN FRANKLIN
From a pastel drawing made in Paris in 1783 by Duplessis, New York Public Library

★ ★ ★

It would be well if all of us could look at the world through Ben Franklin's discerning, gray eyes. It is not the gray color of the eye, but the gray matter back of it that counts. I note here the color of Ben Franklin's eyes only because I have just been "checked up" on the subject of eyes. A reader writes me as follows:

> Let me call attention to a discrepancy in the Julius Cæsar number of The Mentor. On cover page 2 the statement is made that Cæsar's eyes were dark gray. On page 8 it is said that they were black.

Our reader overlooks the fact that the two statements are not made by the same writer. The first statement is made by the English historian James Anthony Froude; the other by George W. Botsford, late professor of ancient history in Columbia University. These two eminent scholars present the conclusions that they have individually drawn from historical study. When two authorities differ it is the duty of The Mentor, as an educational publication, to present the two statements for the reader's comparison. It is probable that the original evidence on which Mr. Froude and Professor Botsford based their statements was to the effect that Cæsar's eyes were very dark and piercing in their glance—and that, surely, is near enough for the color of eyes nearly two thousand years ago.

★ ★ ★

We are reproducing Duplessis's pastel portrait of Franklin on this page. This picture has a story. Duplessis made several portraits of Franklin; this seems to be the only one in pastel, the others being oil paintings. When Franklin was in France he lived at Passy, a suburb of Paris. A friend and neighbor was M. le Veillard, who frequently urged Franklin to write his memoirs. Franklin lent a willing ear, and it was his wish that his neighbor should translate the memoirs, when finished, into French. With that end in view, he turned over to M. le Veillard much autobiographical material. This pastel portrait by Duplessis was made especially for M. le Veillard, and when that unfortunate gentleman met his death on the Revolutionary scaffold in 1794, the picture went to his daughter, and later came into the possession of Mr. John Bigelow, when he was United States Minister to France (1865–66). By him it was presented to the New York Public Library, and it now hangs in the trustees' room.

W. D. Moffat

REPRODUCED BY ARRANGEMENT WITH THE U. S. FOREST SERVICE

"GENERAL SHERMAN" TREE, SEQUOIA NATIONAL PARK, CALIFORNIA

ONE

NO words can describe the stateliness and majesty of the "Big Trees"; no picture can adequately portray their immensity. To appreciate them you must see them, and to understand them you must spend days, even weeks, at their feet. It has been said of them that they are the "crowning achievement of the vegetable kingdom in size and majesty and age." Some of the eucalypts of Australia occasionally equal or exceed the "Big Trees" in height. A few exceptionally old specimens of other species may exceed them in diameter, but no other trees approach them in majesty and dignity of their appearance.

While there has been much exaggeration in regard to the size and age of the "Big Trees," they attain proportions which are well-nigh unbelievable. The greatest known height is 330 feet, but since most of the largest trees have been struck by lightning, which has splintered the tops, a maximum height of 350 feet is not improbable. The girth of the Grizzly Giant at the base is 93 feet, while at 10 feet above the ground it is 64½ feet.

It is when we reckon the age of these giants that our feeling for them approaches that of awe and reverence. From the stumps of these monarchs which have fallen before the saw of the lumberman, we can gain a fairly accurate idea of the centuries that elapsed during their lives. John Muir examined a stump that had been injured by fire and decay, but on which he was able to count at least four thousand annual rings. It is probable that estimates beyond this are unfounded. But consider what it means to have lived for four thousand years. Of the General Sherman tree it has been said that, "It was already two thousand years old when Christ was born. In the age when the known world was rocking in the throes of the Trojan Wars, and at the time that history tells us marked the exodus of the Hebrews from Egypt, it was a flourishing sapling of some twenty or thirty feet in height, and truly under the especial care of the Creator, who held it safe from the lightnings of His wrath as He did from the attack of earthly enemies. It towers 279.9 feet into the sky; its base circumference is 102.8 feet; its greatest diameter 36.5 feet, and it has developed a diameter of 17.7 feet at a point 100 feet above the ground."

The "Big Trees" (*Sequoia washingtoniana*) and their cousins, the redwoods (*Sequoia sempervirens*), are the only survivors of a once numerous race which before the glacial period was widely scattered across this continent and Europe. The "Big Tree" is found now only on the western slope of the Sierras, from Placer County south to Tulare County, California.

PREPARED BY THE EDITORIAL STAFF OF THE MENTOR ASSOCIATION
ILLUSTRATION FOR THE MENTOR, VOL. 6, No. 8, SERIAL No. 156
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REPRODUCED BY ARRANGEMENT WITH THE U. S. FOREST SERVICE

PATRIARCHS OF THE MARIPOSA GROVE, CALIFORNIA

IF trees could talk, as some of the old legends would have us believe, they could tell us in detail the story of many events regarding which history is silent. The oldest living things in the world, they have seen in their lives far-reaching changes in man's civilization, while many of them have been actual witnesses to events that have affected the history of nations.

Doubtless the grateful shade of some trees has led famous men to transact important affairs beneath their branches. And so we find, in almost every country, trees that are connected with some real or traditional happening. It is not always easy to distinguish between the two. At times, indeed, popular stories are difficult to believe. Aristotle and Plato, for example, are supposed to have discussed their respective philosophies under an olive tree that still lives, while a group of twelve of the famous cedars of Lebanon is called "The Twelve Apostles," from the belief that they sprouted from the staves of the disciples of Christ.

In the case of others, however, there is more reason to believe the stories that are told concerning them. Under the ancient oak of Guernica, in Spain, Ferdinand and Isabella pledged themselves to uphold the privileges of the Biscayans. What is said to be the tree on which Rollo, the first Duke of Normandy, hung a valuable gold chain in the belief that his subjects were so orderly that no one would steal it, is still standing.

The Royal Oak at Bonningham, in Shropshire, sheltered the ill-fated Charles II after his defeat at the Battle of Worcester. At Hatfield House, on the River Lea, in England, is an oak under which Queen Elizabeth is said to have received the news of the execution of her cousin, Mary, Queen of Scots. In Sherwood Forest there is another oak beneath whose branches, legend has it, Robin Hood and his followers had a favorite meeting place.

Perhaps the best known American tree is the Washington elm at Cambridge, Massachusetts. Under this tree, it is generally acknowledged, George Washington assumed command of the Colonial armies, on July 3, 1775. A number of other trees, known to have been connected with Colonial and Revolutionary history, are now dead. In the famous Charter Oak, near Hartford, Connecticut, the charter of Connecticut was sheltered at the time the tyrannical Edmund Andros demanded its surrender. William Penn's Treaty Tree, near Philadelphia, was felled by a storm in 1810.

A weeping willow tree which formerly grew on the estate of John Curtis, of Virginia, is said to have been the progenitor of all the trees of that species in this country. This tree was grown from a cutting of another which stood on the grounds of Alexander Pope, at Twickenham, England, and which sprung from a slip included in a box of figs sent to the poet from Smyrna by a friend.

Near Jonesboro, Tennessee, there is an ancient beech tree on which appears the carved inscription: "D. Boone cilled a bar on this tree year 1760." Here, doubtless, the great pioneer camped on one of his trips into the unmapped wilderness, while he skinned the "bar" and enjoyed a meal from its meat.

At Santiago de Cuba there is a large ceiba tree, known as the "Surrender Tree," where General Miles arranged the terms under which the Spanish forces laid down their arms in the Spanish-American War. The beautiful cherry trees which add so much to the attractiveness of the Speedway at Washington were sent by the Emperor of Japan as a gift to Mr. Taft when the latter was President.

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FIGHTING A FOREST FIRE

IT is not so long ago that the Forest Service was a political storm center of first-class intensity, but of late years criticism and denunciation have given place to general acceptance and approval of its work. By practical demonstration of its usefulness it has won the confidence of the public, especially in the West, where hostility was formerly most violent. Its success is a notable example of what can be done in fields of Governmental activity which the orthodox political thought of most of the nineteenth century looked at askance.

The Forest Service operates public properties with a total of 155 million acres. It is a bureau of the Department of Agriculture, and along with its administrative functions has the duty of bringing about the best use of all forests and forest products in the United States. This involves the development of scientific knowledge through research, and education of the public at large as to the best methods of utilizing, while conserving, our forest resources. From the farmer that owns a little patch of woodland to the lumber company cutting a quarter of a million feet a day and the manufacturer that uses wood in any form for the production of the myriad articles that the forest contributes to the supply of our daily needs, the producer and consumer reap the benefit of the investigative and educational work. But the management of the National Forests has been the main task ever since the Forest Service took charge of them in 1905.

As long ago as 1876, a special agent was appointed by the Department of Agriculture to study forest conditions in this country. In 1881, a Division of Forestry was created. For the next twenty years its work was small and inconspicuous, though important from the standpoint of the foundations laid. Under Gifford Pinchot, who became its chief in 1898, it grew rapidly in practical usefulness and public recognition. It was to his foresight, energy, and sagacious leadership that the country owes primarily its forest policy. In 1910, he was succeeded by the present Forester, Henry S. Graves, who has carried forward with exceptional capacity the work of his predecessor and former associate.

Although the setting aside of portions of the public lands as "forest reserves" began in 1891, their development as producing properties opened to every possible form of use beneficial to the public did not really begin until their care was given to the Forest Service. Thereafter the fundamental idea was that they should be handled as public utilities under permanent Government ownership and management. In 1905, this was a somewhat startling conception. To many it seemed like a first step in a dangerous path. Why should the Government engage in such a business. Western sentiment was strongly for rapid disposal of the public lands to private owners. Many interests were soon arrayed against the new idea.

Stockmen accustomed to grazing their herds in the mountain forests without charge, swore they would be ruined by the grazing fees now imposed; lumber companies, disappointed in their efforts to secure vast areas of splendid timber by purchasing it at ridiculously low prices from fraudulent homesteaders, protested that the Government had locked up the resources of the West in the National Forests; miners, whose claims assayed 20,000 feet of timber to the acre and about one cent to the ton of ore, howled despairingly when they were not allowed to secure title; while water-power development companies, quick to see the advantages of the wonderful power sites on the National Forests, but loath to pay the Government for the use of them, brought all their influence to have the policy changed.

The fight was carried to Congress, where bitter attacks were made. Fortunately, there were friends as well as enemies, and the defense of the Forest Service was as spirited as the onslaught. And all the while the Service was gaining in strength because of the soundness of its fundamental doctrine, the business ability with which it was handled, and the fairness of its dealings. The opposition to it developed an *esprit de corps* among its employees which would let them recognize no obstacles, and which knit the organization closely together. Ideals of hard work, fair play, and public service were evolved. Efficient methods new to Government departments were introduced. Though the personnel has changed, these have all lasted. The National Forest policy has become permanent because it has stood the practical test. It has worked. That it is a real benefit to the country is now so generally recognized in the West that agitation against it has virtually disappeared.

Each National Forest is in charge of a Forest supervisor. Under him there are a number of Forest rangers and Forest guards. The rangers carry on the bulk of the protective and administrative work, and must be capable woodsmen of more than ordinary business ability and knowledge of handling men. Their work demands that they be more or less familiar with lumbering and logging, with methods of handling cattle and sheep; that they be good rough carpenters, bridge builders, and blacksmiths; and that they be able to care for themselves and their horses in all kinds of weather. They are a clean-cut, hard-working, capable lot, who fulfil the best traditions of the Forest Service.

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TREES OF FUTURE FORESTS

TREES, like people, require food in order to live. Like people, too, trees make their best growth if they have a balanced ration in which the various food elements appear in the proper proportion. Insufficient nourishment results in retarded growth, and, finally, even in death. In order that sufficient quantities of the necessary foods shall be available when needed, the tree is provided with the means both of securing the raw materials and of preparing them in the proper form for use. The roots of the tree, which serve also to support it, gather from the soil large amounts of water, which is transmitted through the outer layers of wood to the leaves. This water contains varying minute amounts of different minerals, which form a small but important part of the tree's food. In the leaves a complicated chemical process takes place which does credit to Nature's laboratory. The green color of the leaves is caused by a substance known as chlorophyll. Under the stimulus of light and heat the chlorophyll takes up carbonic acid gas from the air, separates it into carbon and oxygen—its two components—and sends the oxygen back into the air, retaining the carbon for future use. The carbon is combined with the oxygen and hydrogen and some of the minerals contained in the water received from the roots into carbohydrates and sugars, which form the tree's food. These are sent from the leaves into all the living parts of the tree, where they may either be used at once or stored until they are needed.

The diameter growth of the tree takes place only in what is known as the cambium, or cambial layer, which is found just beneath the innermost surface of the living bark. The new cells produced here have the property of dividing into two sets. The outer layer of cells form the new bark, while the cells on the inside make new wood. This process takes place all over the tree except in the buds, leaves, and fruit, with the result that each year the size of the tree is increased by the layer of new wood and bark formed by the activity of the cambium cells.

In climates with regularly marked seasons, the formation of the new woody cells takes place only in the spring and summer months. In the spring the formation of the new cells occurs rapidly, and the cells are, in the case of some trees, large enough to be seen with the naked eye. The later summer growth is slower and the cells then formed are thick-walled and dark-colored, so that each season's growth, known as an annual ring, is in the case of many trees plainly marked by a layer of large and small cells. Such woods are called ring-porous, and examples of them are the oaks and chestnuts. Much less conspicuously marked are the diffuse-porous woods, such as birches and maples, in which there is little visible distinction in the appearance of the spring-formed and summer-formed wood of the annual ring. By counting these rings of growth, it is possible to determine the age of the tree.

Growth in height takes place only through twig development. At the close of each growing season both terminal and lateral "winter buds" are formed. Each contains a very condensed embryonic stem or twig. In the spring the buds push out through the formation of new cells, not unlike tiny bricks stood on end one above another, at the bases of a series of lengths. The result might be compared to pulling out a telescope. Each successive length stretches as the cells are formed, until the season's growth is complete. At the end of each length is the "node," where leaves unfold. After the first year the formed twigs grow only in thickness.

An interesting change that takes place in most trees is the gradual transformation of the innermost layers of sapwood (living wood) into heartwood. This change is known as lignification. The cells of the wood in the center of the tree become so choked that the sap will not run through them. The wood becomes darker and harder, and finally dies and takes no further part in the tree's life activities. The dark color of the heartwood of many trees, such as locust, oaks, and pitch pine, appears in strong contrast to the light-colored sapwood, or living outer part of the tree. The heartwood furnishes a strong framework to support the living parts. Heartwood is usually harder and more durable than the lighter sapwood, and on that account is more desirable for certain uses. Not all trees of the same species have the same amounts of heartwood, nor is its formation always symmetrical and from the center, for some kinds of trees form it very irregularly.

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IN A TURPENTINE ORCHARD

ASIDE from the immense quantities of lumber and other building materials that we need for daily uses with which most of us are familiar, the forest furnishes other products which are of prime importance. Numerous as these products are and extensive as is their present use, science is constantly finding new ways by which the constituents entering into the make-up of wood can be utilized. Powder for munitions of war, disinfectants against contagious diseases, and artificial silk for clothing are among the products which the forest furnishes in whole or in part.

Charcoal is essential for the manufacture of black powder, while all of the acetone which is used as a solvent in making nitrocellulose powders is derived from acetic acid, most of which is obtained by hardwood distillation. From our southern yellow pine forests comes ninety per cent. of the world's production of pine tar, rosin, and turpentine, known generally as naval stores. Among other uses, rosin is employed in the manufacture of shrapnel and as a "size" in making paper, while tar and turpentine fill a number of widely varied needs in our industries, arts, and sciences.

Pure wood alcohol, one of the products of destructive distillation of hardwoods, is the only substance which can be converted commercially into formaldehyde, which is universally used as a disinfectant. Ethyl alcohol is made from the sawdust of coniferous trees, as well as from grain or molasses. This is of particular importance at this time when the foodstuffs ordinarily used in the manufacture of alcohol are vitally needed for human consumption, and when large quantities of the alcohol are in demand not only for munitions but for other industries.

By converting wood cellulose, in the form of chemical pulp, into a gelatinous material, known as viscose, a wide field is opened for the utilization of wood wastes, and a new line of products varying from sausage casings to tapestry is added to the already lengthy list. Many of the "artificial fiber" and "vegetable silk" socks, neckties, and fancy braids now on the market contain artificial silk made from wood.

About nine-tenths of all the paper we use is made of wood. To supply the demand for newsprint paper alone requires vast quantities of certain kinds of wood. It is estimated that a newspaper with an average circulation of sixty thousand copies and an average edition of twenty pages uses the product of between two and three acres of forest every day. For some of the "kraft" and sulphite papers, new uses are constantly being found. Cut into strips, they are spun or twisted into onion or coffee bags, mattings, suitcases, and even furniture, closely resembling that made of reeds.

A yellow dye made from the mill waste of Osage orange has, within the past few years, been put on the market as a substitute for fustic. Many other dyes, such as logwood, saponwood, and sandalwood, are obtained from the forest. Crude rubber, so vitally necessary to our present-day civilization, is another product. Drugs made from trees are almost innumerable. Of these, quinine, from the bark of the cinchona, is one of the best known. Perfumed woods, such as sandalwood, have long been staple articles of commerce. Chewing gum is made from the gum of the tropical sapata, as well as from the resinous spruce gum with which most of us are familiar. The bark of all trees contain some cork, but the cork oak of southern France specialized in this product.

There are still the various fruits and tannins, which cannot even be touched upon. Even to enumerate these would mean a list that would seem almost endless.

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A SAWMILL IN THE LONGLEAF PINE REGION

MODERN warfare is as dependent upon wood as upon powder and cannon. This is especially true as the importance of engineering work has grown. Vast quantities of lumber are required for barracks, supply depots, hospitals, and other temporary structures. Every rifle has a wooden stock. The big guns must often rumble up to the firing line through the mud on roads of plank; temporary tramways and railway extensions are laid and relaid; trenches and dugouts and mines must be heavily timbered; barbed-wire and telephone wire are strung on multitudes of wooden posts. Behind the lines the supporting railways, so vital to an army's existence, rest on wooden crossties. There must be timbers for trestles and bridges. Upon the supply of firewood for cooking and heating depend in large measure the health and comfort of the troops. Great quantities of piling may be needed for docks and wharves. About 200 board feet of wood is essential to the manufacture of every airplane.

A large part of an army's supplies is shipped in wooden boxes. For this purpose alone immense amounts of lumber are needed. Transport wagons and gun carriages require in the aggregate great quantities of high-grade material.

Along with these varied uses account must be taken of the chemicals derived from wood which are essential to modern warfare. Acetone, formaldehyde, cellulose, alcohol, and many others, each plays its own important part. Specially prepared wood pulp, similar in appearance to gauze, has been used as surgical bandaging. Wood flour, or finely ground sawdust, enters into the manufacture of dynamite.

Without ample supplies of wood an army would find itself greatly enfeebled both for offense and for defense.

After the United States entered the great war in 1917, one of the first requests of the British Commission was for a regiment of woodsmen to re-enforce their own "forestry companies," raised in Canada. But before the regiment could be assembled and sent over, the needs of our own expeditionary troops began to loom so large that thousands of men were soon in training for forest work. The rank and file were gathered from the sawmills and lumber camps of our great American lumber industry. As fast as they could be organized, disciplined, and equipped they were despatched to France and put into the woods. Fortunately, France, though a densely settled country, was well supplied with a carefully conserved stock of standing timber, grown under the practice of forestry. Otherwise, the whole history of American operations might have been changed.

For generations the French have used the rougher, less fertile parts of their country to grow timber, just as they have used the better soils to grow wheat and other food supplies. Their forests are "hand-picked," scientifically tended and harvested with care, so that the yield may be of the best, and the power of the land to produce more wood may not be impaired. The American forest engineer forces were, therefore, officered partly by trained foresters, able to understand and apply the French methods.

The greatest war of all history made clear not only the close relation between success in battle and sufficient supplies of wood as a war munition, but also the importance of national foresight to insure the existence of adequate sources of supply. Since forests are conserved through right use and not through being withheld from all use, one of the great lessons of the war for the United States is the value of forestry as a measure of military as well as of industrial preparedness.

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LONG-BODIED TIMBER

THE FOREST

By
HENRY S. GRAVES
United States Forester

MENTOR GRAVURES

GENERAL SHERMAN TREE

PATRIARCHS OF THE MARIPOSA GROVE

FIGHTING A FOREST FIRE

TREES OF FUTURE FORESTS

IN A TURPENTINE ORCHARD

A SAWMILL IN THE LONGLEAF PINE REGION

IN STATELY COMPANY

THROUGHOUT the ages the forest has played a large part in man's progress and development. In the earlier stages it hindered and in the later stages helped man's struggle upward. It has furnished material for his dwellings, for the ships that have carried his goods across the seas, for his implements of peace and war. Its products have entered largely into his commerce, and have made possible his advances in many of the arts and sciences; while both its economic and its protective values have influenced the destinies of great nations.

To primitive man the forest furnished both food and a home. Later, when he had become a meat eater, man left the forest for the treeless plains, where he found in abundance the animals upon which he preyed. He became a dweller in the open places, and the forest was both a barrier to his wandering migrations and a protection against hostile tribes. Its darkness, gloom, and dangers caused him to think of it as the abiding-place of evil spirits. Goblins, gnomes, sprites, and other fearsome creatures dwelt in its hidden recesses. But there were kindly deities as well. The dryads, symbolical of the connection between the lives of trees and of men, and the nymphs, goddesses of moisture, also had their

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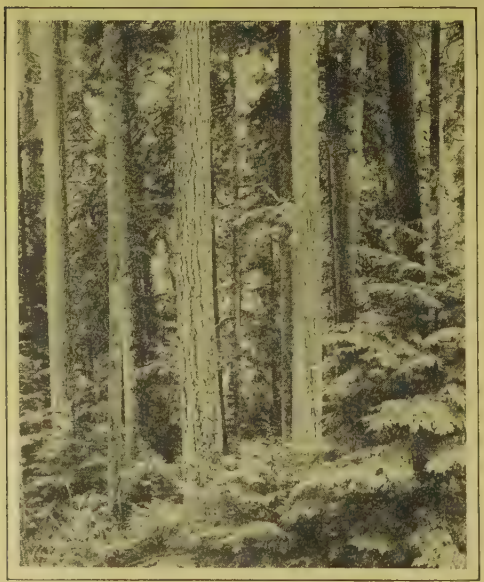
homes in the forest, and certain groves were regarded as sacred. Tree worship was early and widespread.

A PERFECT WATERSHED
The water of this lake is clear as crystal

As man increased in intelligence and ingenuity, and developed more effective weapons, he became bolder, and lost much of his old fear of the forest. He learned to use its materials for his needs. The earliest and most important service that the forest rendered and one that has come down to modern times was furnishing fuel for man's fires. From its woods also he built rafts, dugouts, and finally boats, and with these, he was able to supplement his wanderings across the open places with ever-lengthening journeys along the waterways, and thus to explore territory hitherto denied him.

The forest became of growing importance as civilizations rose and fell. In the early days the cuttings were naturally unrestricted. Man helped himself to what was at hand, with no thought of the need for foresight, and with no knowledge of methods of control that would permit use without destruction. Grazing and fire swept away the young growth. The result was that in many places the forest disappeared entirely. Then the people suffered from lack of wood; and floods, avalanches, and landslides visited upon man the consequences of disturbing nature's balance.



A FOREST IN THE PACIFIC NORTHWEST

Learning to Use the Forest

By such lessons the value of the forests and the necessity of protecting them from destructive agencies were taught. The first attempts to use the forest were crude, but as knowledge increased man learned how to eat the cake and have it too.

To the hardy adventurers that first came to America the almost unbroken forests of splendid timber were deterrent, rather than beneficial.

They made exploration and travel difficult and perilous. They occupied the ground that the newcomers desired for farms. Before fields could be cultivated or crops could be sown, the woods had to be cleared away and the unusable material disposed of. Besides, the forest sheltered hordes of hostile savages and packs of preying wolves, which swept down on the lonely, scattered settlements, and brought fear and hatred to the pioneers. In that stage the forest was hostile and full of menace. The first thought of the settler was to clear it away and devote the land to better use, and, at the same time, to rid himself of the dangers it hid.

Later, when the new civilization was firmly established, the colonists began to exploit the forest resources of the land. Rafts of white pine were floated down the streams of New England to supply the demand for building material in the settlements along the coast. With great forests of unexcelled timber close at hand, shipbuilding flourished and American ships became familiar sights in every port of the world. Other wood-using industries sprang up. The continued development of the country produced an enormous demand for building material. Instead of a menace and danger, the forest became a vast storehouse from which untold millions of dollars were taken in timber and other products.

AN AISLE IN THE CATHEDRAL OF THE FOREST

Gradually the more accessible forests were recklessly cut away, and it became necessary to bring the needed timber from increasing distances. The industries dependent upon the forest were transitory; whole communities vanished and the tide of industrial development turned backward when the sawmills finished and moved on. Other forces, too, were at work. Certain changes that followed the removal of the forest could not be ignored. Hillsides, cleared of the timber they once supported, washed and gullied and became unfit for any purpose. Springs in cut-over lands dried up. Creeks were no longer clear, but turbid and full of sediment after the rains; alternate periods of flood and low water replaced the former equable flow of the streams; sand-bars appeared in the rivers, and hindered or prevented navigation.

The Forest Nature's Balance-Wheel

Unrestrained by the controlling forests, the forces of nature hastened their work of leveling the earth's surface, made easier by the unconsidered stripping of each additional acre of mountain woodland.

AN OREGON FOREST
On the southern slope of the Columbia River Gorge

It was only when these things forced themselves upon our attention that we woke up to the fact that the forest was one of nature's great balance-wheels in the matter of stream-flow, and realized that when we destroy the forest we throw out of gear the whole machinery of things. Everyone has seen bare hillsides cut by innumerable gullies; most of us have, at one time or another, noted how muddy the waters of creeks become after heavy rains. How many of us have connected the hillside gullies and muddy creeks with our annual floods and with the millions of dollars we spend in dredging our rivers and harbors? And yet there is a very close connection; and the forest—or, rather, the lack of the forest—plays a large part in all three.

As the rain or snow water falls upon the earth, it either runs off on the surface or goes into the soil. Cleared fields and open lands are pounded and compacted by the rain and baked by the sun, and it is hard for the water to soak in. In times of heavy rainfall, therefore, a large part of the water runs off on the surface, and in doing so cuts out channels and carries earth away. On steep slopes these channels soon deepen into gullies, erosion is rapid, and the soil is washed down into the streams. The coarse material forms sand-bars in the rivers, while the finer sediment is carried down and deposited in our harbors.

WHAT FIRE DOES
Scene of the great fires of 1910 in the Cœur d'Alene National Forest, Idaho

In the forest, however, the trees break the force of the falling rain and cause it to drop gently to the ground. The accumulation of fallen timber, twigs, and leaves, checks the runoff, which the spongy forest floor soaks up like a great piece of blotting paper. Humus is added to the soil by decay, making it

RAINBOW FALLS
Chelan National Forest, Washington

rich, "mellow," and porous. In addition to this, the tree roots strike deep and furnish subterranean passageways for the soil water. Thus the capacity of the soil reservoir is greatly increased, and the water is gradually fed out to the springs and streams of the region. For these reasons the water of the creeks and rivers in a forested country is clear and free of silt.

The regulating influence of the forest also affects the local climate. Everybody knows that in summer it is cooler in the shade of the forest than in the open, while, in winter, bodies of timber are a valuable protection against the force of storms and cold winds.

All these things were known long ago in the older countries of Europe. The New World, however, had to have its lesson in fighting and wasting the forest before its importance and the need of caring for it could be realized. And we have had it. We have seen vast stretches denuded of timber and left a desolate waste by the fires that often follow lumbering. We have seen hillsides, cleared of the protecting forest, washed and eroded. We have experienced the horrors of floods that assumed the size of national disasters. Properly cared for, the forest is man's friend and protector; abused or destroyed, it exposes him to the unrestrained might of the forces of nature, by which he is buffeted and swept about. Hard experience has taught us that by a little care the forest may be perpetuated even though its resources are utilized, and it is this that forestry, or the care of the forest, makes possible.

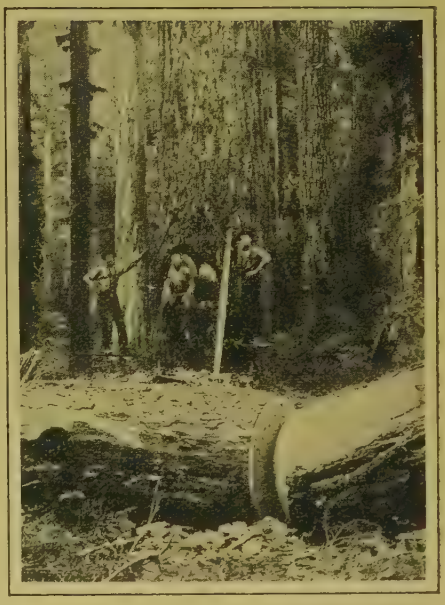
WHAT HAPPENS TO STEEP SLOPES WHEN THE FOREST IS CUT

The Tree's Life Struggle

Now, the care of the forest involves a multiplicity of features that are not apparent on the surface. To most people the forest is merely a collection of trees, without rhyme

or reason; but to the woodsman the forest is a complex community not unlike a modern city. There is the same constant struggle for existence among trees as among mortals. We find towering individuals that have outstripped their fellows and stand distinctively above them. There are trees stunted and gnarled by the fight for light and moisture; others—the great middle-class of the forest—have obtained their share of the necessities and reached a comfortable maturity. Side by side we find old age and callow youth, failures and successes. Composed of living individuals, the forest is keenly sensitive to hostile agencies. Fire, insects, disease, and man may destroy the forest on great areas. But the forest responds quickly to good treatment, and more than justifies the care bestowed upon it.

WHAT FORESTRY DOES
This timber has been logged, but enough trees are left to insure a future stand



IN THE FORESTS OF THE NORTHWEST
Giant Douglas fir, Sitka spruce, and cedar are found here

Because trees, in their own way, are as susceptible as people to heat or cold, there is a wide variance in the make-up of forests. Some trees prefer the cold climate of the North and do not thrive in the South. Others will grow only in the hotter climates. A limited third class are able to adapt themselves to their location, and are found in both sections. For this reason the forest is characteristic of its location. The forests of New England are as typical of the region as the villages, and differ as much from the forests of the South as does the enunciation of the people. The climate, then, is the first great determining factor of the range within which trees grow. Differences in elevation result in the same change in the forest as differences in distance north or south.

The different trees have certain requirements of light and moisture and soil which must be met if the tree is to thrive. The hardwoods, or broad-leaved trees, for example, require in general a better soil than the

conifers. For this reason the character of the soil is sometimes designated by the kind of timber it supports, and in parts of the South we hear such terms as "poor piney-woods land," and "good post-oak land." As a rule the conifers are clannish, and extensive areas are occupied by forests composed mainly of one species, while the different hardwoods mingle freely with each other, or even with some conifers.

After the general range of a tree has been fixed by the climate and by soil requirements, its abundance depends upon its success in the fight which it must wage with other trees. How constant, and how deadly and merciless a fight this is, only those that know the forest realize. For every tree that reaches maturity, thousands are overcome and die in their infancy and early youth. The twisted, misshapen forms of many trees are grim evidence of their desperate struggle for a "place in the sun." Some trees, like the spruce, are so constituted that they can play a waiting game and live years with very little light, and then put on rapid growth when an opening in the forest gives them more space. Others must have relatively large quantities of light to live, and die unless they get it. And, between these two extremes, there are many trees that get along very well on moderate amounts.

Thus the three factors of climate, soil, and light bring about characteristic forests in the different parts of the world. But because a tree is native to one region does not mean that it can not grow elsewhere. Oceans, mountain ranges, or other natural barriers are often responsible for confining certain species to relatively limited localities, when they may be adapted to grow elsewhere.

United States Forests

The forests of the United States may be divided into six great regions. The northern forest of the Lake States and the Northeast has in the past supplied us enormous quantities of the highest-grade building materials. The white pine, spruce, hemlock—among the conifers—and the beech, birch, and maple are familiar trees of this region, which extends south along the Appalachian Mountains in a long, narrow tongue to north Georgia. South of this, extending from Ohio, Pennsylvania, and Illinois to the Southern States and including the lower slopes of the Southern Appalachian Mountains, is the central hardwood belt, the home of the oaks, chestnut, yellow poplar, and other well-known broad-leaved trees. Still farther

UTILIZING THE FORAGE OF THE FOREST

south and reaching down to the Gulf of Mexico lies the southern pinery, whence we obtain the longleaf pine, which, in addition to being a valuable timber tree, supplies the bulk of the world's supply of turpentine, rosin, and pitch. This region is characterized also by extensive stands of hardwoods in the swamps and along the streams. Down in southern Florida there is a belt of subtropical forest where the palms and other plants of hot countries flourish.

THE GRIZZLY GIANT*
Mariposa Grove, Yosemite National Park, California

HARDWOOD FOREST OF THE APPALACHIANS
The giant yellow poplar in the foreground will furnish many thousand board feet of valuable lumber

As we go west the towering forests give way to open, short-bodied stands of oak, and finally disappear entirely, the only trees being those along the streams. In the Rocky Mountains a new type of forest occurs, and the Engelmann spruce, lodgepole pine, Douglas fir, and western yellow pine form the stand.

On the west side of the Rockies in the north, the western white pine and western larch are added to the forest and are important timber trees, and when the Pacific slope is reached, we find a forest that is unlike any other. In the Northwest there are enormous stands of great Douglas fir, ten to twelve feet in diameter, and an abundance of western hemlock, Sitka spruce, and a number of other trees. The growth is rank and the forest dense.

In California these species give way to and are mingled with giant sugar pines, the redwoods, and their cousins the "Big Trees"—the patriarchs of all trees, and, indeed, of all living things.

Perhaps no other nation in the world was so bountifully supplied with such a variety of woods as we once had. But the great extent of the forest was its undoing. We have abused and destroyed our forest until already the time has come when we can see the end of our supply of virgin timber. We are still the heaviest users of wood of all the nations, and we take from the forest each year much more timber than the growth of the forest provides.

To the forest we can attribute much of the wonderful development which was made in the past century. Its great stores of cheap building material have made it possible for towns and cities to spring up almost

*Height, 204 feet; 93 feet in circumference and 29 feet in diameter at base; 64½ feet in circumference and 20 feet in diameter at a point 10 feet above the ground.

overnight, and have enabled persons of moderate means to build and own their homes. From the forest we have secured the immense supplies of cheap paper pulp material which have given us a more widely distributed press than any other country. From it also we take 80 per cent. of all the pitch, tar, and turpentine used in the world, as well as acetic acid and other chemicals almost indispensable in the arts. And depending on the forest, there has developed the lumber industry, which employs 900,000 men and women, and represents an investment of two and one-third billion dollars. It is second only to agriculture among the basic industries of the United States.

Forest Reserves

It was to guard against the possibility of an exhaustion of our timber supply, and to continue the regulating influence on stream-flow and climatic conditions which the forest exerts, that the policy of establishing National Forests was inaugurated in 1891. The first to be created was the "Yellowstone Park Timberland Reserve," which was set aside in that year by President Harrison.

Other reservations were made out of the timbered portions of the public domain, until at the present time we have 147 National Forests, which comprise approximately one hundred and fifty-five million acres. They are located for the most part in the western mountains, and contain a stand of timber estimated to be about five hundred and sixty-five billion board feet, as well as a vast amount of cattle range and water power.

THE WAWONA TREE, MARIPOSA GROVE
Height, 227 feet; diameter at base, 26 feet

They are under the charge of the Secretary of Agriculture and are cared for by the United States Forest Service, which

THE MONTEREY CYPRESS
It takes its form from the ever-present winds that blow in from the Pacific

supervises the sales of timber, the stock grazing, and the use of the water power and other resources contained in the forests, and sees that provision is made for perpetuating all of these resources.

IN A SOUTHERN PINERY

What the Forest Supplies

Many of the National Forests are in inaccessible localities, long distances from the nearest general market, but, though their timber is not available for present general use, they are of inestimable value to the scattered settlers of the region as sources of supply for the necessary building materials. The stand of timber in these forests is in the nature of a reserve supply to be used when the more accessible timber has been cut. Others are so located that a ready demand exists for their products. In such cases, as much of the timber as is mature and can be spared without reducing the amount of forest capital is sold for the general market, and the money deposited in the federal treasury. In the fiscal year 1917 the income from sales of timber of the National Forests was $1,692,500. Of scarcely less importance than the timber is the forage which the National Forests contain. About twenty-four per cent. of the cattle raised in the West are dependent upon the National Forests for their summer feed, and it is estimated that no less than fourteen million cattle and sheep, inclusive of calves and lambs, use the National Forest ranges each year. A moderate fee is charged for the grazing privilege, the revenue from which in the fiscal year 1917 was $1,549,795.

HOW THE FOREST ADVANCES
In this No-Man's-Land, from which a glacier has retreated, the forest is beginning to advance

Aside from the vast resources which the National Forests contain and the revenue which they return to the Government, they exert other influences, indirect but far-reaching. All of the important streams rising

COLLECTING SEED FOR FOREST PLANTING
In the hiding-places of squirrels, rangers find seed for planting new forests

in the western mountains have their sources within the forests, and their flow is largely controlled by the regulating influence which the forest exerts in absorbing and gradually releasing the water from rain and snowfall. Most of the great irrigation projects which have transformed hundreds of thousands of acres of arid desert into fertile fields are dependent for the life-giving water upon streams rising in the National Forests. It is essential to the success of these projects that the forested watersheds of the streams be protected from fire and indiscriminate cutting, which would result in alternate periods of flood and drought and in a gradual filling up of reservoirs by sediment.

Finally, the forests serve as great, unexcelled public playgrounds, where the residents of the faraway cities and the low, hot valleys can escape the summer heat. In the cool shade of giant pine and fir and spruce, by rushing, ice-cold streams, thousands of visitors pitch their camps. Carefully constructed roads and trails enable the traveler to penetrate the distant back country. Quiet valley and jagged peak tempt the adventurous explorer, while Nature's greatest textbook—the forest itself—lies open to all who care to learn the secrets and lessons it holds.

MT. EDDY FIRE LOOKOUT STATION, SHASTA NATIONAL PARK, CALIFORNIA
From here warning of approaching flames is sent by telephone or heliograph to rangers

SUPPLEMENTARY READING

HANDBOOK OF TREES *By Romeyn B. Hough*
OUR NATIVE TREES *By Harriet L. Keeler*
THE TREE GUIDE *By Julia E. Rogers*
FARMS, FORESTS AND EROSION
A pamphlet published by the United States Department of Agriculture.

THE HUMAN SIDE OF TREES *By Royal Dixon*
FORESTS OF YOSEMITE, SEQUOIA AND GENERAL GRANT NATIONAL PARKS *By C. L. Hill*
Published by the United States Department of Agriculture.

*** Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

"I have just been visiting a tree I know," wrote Thoreau. An interpreter of trees was Thoreau. He knew their individual characteristics and their relative standing in the forest community, and he learned many secrets from the gossip of their leaves. Do you know a tree—even one? Have you ever tried to be a friend to the trees? The Druids, in the olden time, revered trees of all kinds, and held some trees sacred. Many of us today hold no trees sacred. We take their bounteous service to us for granted, and destroy them ruthlessly on the slightest pretext. To many, a beautiful bit of woodland is simply so many feet of lumber. And yet, as a great tree-lover has observed, "a fine flourishing tree is of more service, and is more of an ornament in the community than some human beings—and it lasts longer." The mere companionship of trees has made strong men out of weaklings. Ask a forest ranger: he will tell you that many a man has come out to the big woods half broken, and has gathered sap and sinew and strength from the friendly trees. Perhaps the man he will tell you about may be himself. That was so in the case of the ranger that told me.

★ ★ ★

Tree friends have personal qualities that endear them to us. We can feel their vitality, sense the individual aroma that each one exhales, and hear their voices. "Do you mean that trees have voices?" exclaims prosaic Peter Bell. Most certainly. Trees, indeed, have voices, and we have heard them often—the soft whisper of the poplar in the summer-night air, the long-drawn sigh of the maple and elm as the cool rain-winds stir them after a scorching day, the rustle of the horse-chestnut, and the moan of the pines. Tune up your ears, Peter Bell; you are missing much in this beautiful world of ours.

★ ★ ★

The saddest tree I know lives in New York City. It stands in a small enclosed space between two brick buildings—a slender, sickly elm, with a gash in its side. Sometime in the past, someone cared enough to give it a treatment of tree dentistry. But the cement filling has fallen out, and the cavity is exposed to the inroads of decay. In the spring the tree tries bravely to make a fresh start. It buds, puts forth leaves, and stretches out its gaunt limbs invitingly toward the sunshine and spring showers, hoping for a revival of health and strength. But long before midsummer its leaves are yellow and dry, and its limbs droop limply. It has tried hard to make a "go" of things. Thirsting for the moisture in the gutter, it has thrust its roots out under the sidewalk until the paving stones have been displaced. It has reached out beyond the house line to catch the sunshine that falls there part of the day. But the city heat is merciless, the soil is poor, and the sunshine and rain are not sufficient—and then, too, there is that festering cavity in its side. The tree is one of the many sufferers in a great city, and all it can do is to suffer on—like the others. When the wind rises it leans out and flutters signals of distress to its fortunate brothers that live and thrive in the park nearby. That was what first attracted my attention to the tree. There was an air of pleading about it.

★ ★ ★

All that trees want is fair treatment—just something a little better than murder and arson. The green things of the earth respond readily to encouragement, and they remain steadfast and faithful under trying conditions. More than that, if Man gives Nature a rough deal, she refines and softens the effect of it by covering the defacement in a short time with a cloak of verdure. "Man marks the earth with ruin," wrote Byron, and it is tragically true today; but Nature is a great restorer, and comes readily to the rescue when Man gives her the chance.

★ ★ ★

It cheers the tree-lover mightily to read of the splendid work that Uncle Sam is doing for the protection of the forest reserves. Let the same spirit be carried into all communities, large and small, and let every community have a live, enthusiastic, intelligent Tree Commission. Then we may, though perhaps somewhat tardily, repay Nature for the damage Mankind has done her in the past.

W. D. Moffat

EDITOR

IN THE METROPOLITAN MUSEUM OF ART, NEW YORK PORTRAIT OF FEDERIGO GONZAGA, BY FRANCIA

ONE

THOUGH Francia can hardly be ranked with the giants of Italian art, he has given us a number of placid altarpieces and a few exceptionally attractive portraits. The portrait of Federigo Gonzaga is one of the best from his brush. Francia, a shortening of Francesco, was born in Bologna, Italy, in the year 1450 or thereabout. He took the family name of the goldsmith, Raibolini, to whom he was apprenticed at the beginning of his artistic career. As a worker in metal he did some die-cutting for medals, and designed some highly decorative pieces of jewelry. We have an indication of his interest in this phase of art in the necklace worn by Federigo Gonzaga. When Lorenzo Costa, later known as the head of the Bolognese School of painters, settled in Bologna, Francia became his intimate friend, and from that time on seems to have devoted his attention to painting. As regards the graceful pose and expression of his figures, he belonged among the followers of Perugino, a painter who had a strong influence upon the work of his most illustrious pupil, Raphael. Francia's earliest dated altarpiece was completed when he was about forty-five, but he had probably been working in conjunction with Costa for a number of years before that time. Professor John C. Van Dyke, in his "History of Painting," tells us that Francia's "color was usually cold, his drawing a little sharp at first, as showing the goldsmith's hand, the surfaces smooth, the detail elaborate." Francia died in the year 1517.

The tale of the way in which the commission was received to paint the portrait shown in this gravure is interesting. Federigo was the son of Francesco Gonzaga, Marquis of Mantua, and Isabella d'Este, the famous art patron. While fighting in the company of the Milanese against the Venetians at Legnago, the Marquis was captured, but through the intervention of the pope was liberated. However, the pope demanded as a hostage Francesco's son, Federigo, then ten years of age, stipulating that he be sent to the papal court at Rome. The boy's mother, on being parted from him, insisted that she have a portrait of him, and on the journey to Rome, in July, 1510, he halted at Bologna, where his father was, and visited the studio of Francia. In ten days the artist had completed the portrait with the exception of the background, which was finished later. The noble mother was much pleased with the result, and in expressing her gratification to the painter sent him thirty ducats of gold. We have in her own words the statement that "it is impossible to see a better portrait or a closer resemblance."

The panel, a singularly perfect example of Francia's careful manner of painting, passed from Isabella d'Este to a gentleman who had done her a service, and thereafter remained in obscurity until, over three centuries later, it appeared in a London auction room in the collection of Prince Jerome Bonaparte. Later it came into the possession of Mr. Altman, who bequeathed it to the Metropolitan Museum of Art.

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OLD WOMAN CUTTING HER NAILS. BY REMBRANDT

Rembrandt van Rijn

TWO

THE keeping of a few dates in mind greatly aids in understanding Rembrandt's pictures. His birth date has been variously given as 1605, 1606, and 1607. Rembrandt's story has been told at length in previous numbers of The Mentor. It is said that "whatever he turned to was treated with that breadth of view that overlooked the little and grasped the great." His earliest work dates from 1627. In 1632 came his first great success, the famous "Lesson in Anatomy." He was at that time living in Amsterdam, having moved there from his birth city, Leyden, Holland. Pupils and patrons flocked to his studios, and the world was very bright. He became the best-known portrait painter of the richest art and commercial center of Holland. In 1634 he married Saskia van Uylenborch, daughter of an aristocratic family and a young girl of attractive qualities, who brought him many friends and bore him four children. Rembrandt loved his wife devotedly. He made many portraits of her, including one of her with himself that hangs in the Royal Gallery at Dresden. In 1641, the fourth child was born, a son, whom they named Titus. A portrait of this "Golden Lad," as his father liked to call him, hangs in the Metropolitan Museum. It was painted when he was fourteen: "The wide-set eyes and full upper lids mark his artistic inheritance, but the far-away haunting expression seems a premonition of his death in early manhood." Saskia's death came in 1642, when Titus was less than a year old.

Broken by the loss of his wife, Rembrandt continued to paint under increasingly bitter circumstances, but his work showed no diminution in merit, only a deeper feeling. When he was about thirty-five he received an order to paint Captain Banning Cock's company of Dutch musketeers. His manner of handling the lights and shadows of this renowned masterpiece was misunderstood by French writers of a later period, who called it "The Night Patrol," and Sir Joshua Reynolds, falling into the same error, named it "The Night Watch," instead of "The Day Watch." Great dissatisfaction followed the original exhibition of this sortie of the civic guards through the jealousy of those that thought they had been slighted in the composition of the grouping. This dissatisfaction cost Rembrandt much subsequent patronage, and thereafter he was no longer the darling of Amsterdam, but a man saddened by personal griefs and overwhelmed by adversity.

"The Mill," now in the Widener Collection in Philadelphia, was executed during this dark period of Rembrandt's life. Under the same influences he painted "The Old Woman Cutting Her Nails," judged one of the rarest gems of all the Rembrandt pictures owned in this country. It portrays the sympathetic feeling of the artist for old age, and is "typical of the care-worn, sorrow-wrecked woman of all time." Says a critic, "This picture is simply of a poor old woman intent on cutting her nails, with a pair of sheep-shears it seems, yet we are overcome with the power of it —no details, dull in color, homely in subject, but bathed with a light that never was on land or sea. Rembrandt's light! What cared he for poverty or neglect with such a comforter at hand?" The "Portrait of Rembrandt" in the Museum was painted by himself when he was fifty-four, and is one of about sixty self-portraits. In 1668, he painted the "Man with a Magnifying Glass." This, too, hangs in the Museum, and also the grim "Pilate Washing His Hands." The last picture purchased by Mr. Altman, whose entire collection was obtained in the space of a few years, was "The Toilet of Bathsheba," thought by many judges to be the loveliest of Rembrandt's pictures that tell a story. It was painted in 1643.

Rembrandt died in 1669. Twelve years before, he had been sold out of house and home. It is said that there are in America today more paintings by this greatest of Dutch masters than in any one country of Europe. Thirteen pictures signed by him became a part of the Altman Collection. There are now about one hundred Rembrandt paintings owned in this country. The "Orphan Girl at Window" is in the Art Institute, Chicago. Mr. Frick, of New York, acquired the so-called "Polish Rider" and "Rembrandt Seated." Other examples of Rembrandt's genius are in galleries in Boston, Philadelphia, New York, and Cincinnati.

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JAMES STUART, DUKE OF LENNOX, BY VAN DYCK

Anthony van Dyck

THREE

THE Metropolitan Museum offers an unusual chance for the study of Van Dyck's (dike) portraits, though it possesses none of his figure subjects. In point of time, the "Portrait of a Man" from the Marquand Collection in the Museum is probably the earliest of the eight portraits attributed to him. For a long time it was attributed to Van Dyck's master, Rubens. The "Portrait of a Lady" (holding a black feather fan) from the same source, seems also to belong to the first Antwerp period. Van Dyck was born in Antwerp on March 22, 1599. In 1621, when he was twenty-two years of age, Rubens advised him to visit Italy. Aside from some occasional journeys, he seems to have spent his time at Genoa, and for nearly five years he painted the nobility of that thriving port. It was during these years that the "Marchesa Durazzo" of the Altman Collection was done, as was also the portrait of his friend and fellow-townsman, Lucas van Uffel, whose activities as a merchant had brought him to Genoa. Upon his return Van Dyck worked for five years in Antwerp, painting during that time many altarpieces and religious subjects for the churches and chapels of the city. The portrait of Baron Arnold Le Roy (Hearn Collection) was probably painted within this period.

From Antwerp, Van Dyck went to London at the invitation of Charles I. Many portraits of the king, of Queen Henrietta and their children testify to the high esteem in which he was held. His popularity was so great and his commissions so numerous that he was compelled to hire a number of assistants. The helpers painted the costumes and draperies of the portraits, while their employer limited his brush to the painting of the faces and hands.

The portraits of the famous art patron, The Earl of Arundel and his grandson, and of James Stuart, Duke of Lennox, came in this period, when the artist's short life of forty-two years was drawing to a close. The Duke of Lennox was a cousin of the king, who created him first Duke of Richmond. The Duke is said to have offered to ascend the scaffold in the place of his noble cousin when Charles I was condemned. Whether the rank of the sitter prevented Van Dyck from allowing his assistants to have anything to do with the portrait we cannot know positively, but seldom has a more superb portrait come from his brush. How remorselessly the weakness of his character is given! Note the mastery in the placing of the star of the Order of the Garter, and the emphasis given to the devotion of the superbly painted greyhound.

There came into the market a few years ago a number of portraits from one of the old Genoese palaces, where they had hung since Van Dyck painted them. A majority of these pictures passed into American collections. Two were secured by Mr. Frick, and three more became a part of the Widener Collection in Philadelphia, where they hang in the company of two others of this master's fine canvases.

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IN THE METROPOLITAN MUSEUM OF ART NEW YORK YOUNG WOMAN WITH A WATER JUG, BY VERMEER

LESS than two score of Vermeer's pictures are known to us today, and, of these, eight or nine are now in the United States. Any one of them is worth a fortune. In this case artistic and commercial values go together. Little is known about Vermeer. The dates of his birth and death (1632-1675) have been found in his native Delft. There he lived and worked for forty-three years. An early traveler, describing Delft, mentions Vermeer, and states that his pictures were much sought after. They were originally valued at six hundred livres, equivalent to about one hundred and fifty dollars, in those days considered a large sum. Vermeer's family was large, and he was fairly prosperous. But after his death, for some unknown reason, he seems soon to have been forgotten. Houbraken, the chronicler of the Dutch painters, did not mention him, and this neglect possibly accounts partly for the oblivion into which his work sank.

The reason why Vermeer's contemporary fame was not greater is not far to seek. The Dutch artists were all finished craftsmen. De Hooch, Terborch, and Metsu are painters of the same high rank as Vermeer. Jan Steen, the Van Ostades, and some of the lesser men were hardly inferior. Moreover, not only was there little traveling on the part of the art patrons in those days, but the artist could seldom think of moving from one town to another because he would have had to purchase burgher-rights and guild-rights in each new place of residence. After settling, and having once established a demand for their pictures, we seldom find the Dutch artists moving on to evils they knew not of in other cities. In consequence, the artist's fame, however well-deserved, rarely spread beyond a very limited range. Vermeer's early death and the small number of pictures finished by him prevented his work from being widely known, and contributed more than anything else to its being soon forgotten.

In 1866, interest in Vermeer revived through the publications of E. T. J. Thore, who wrote under the pen name of W. Bürger. The greater part of Vermeer's pictures consist of light-flooded interiors, with usually but a single figure. Sometimes a "Music Lesson" will show master and pupil, but seldom are there more than three or four figures. There are two famous outdoor scenes—the smaller in the Jan Six Collection at Amsterdam, the larger in the Maritshuis (marits-heuse) at The Hague. Then there are three or four portraits, surrounded by atmosphere, and brilliant in lighting. Lastly there are a few canvases very different from any of these others, painted with a broad brush on a larger scale and with great fluency. This seems to be the style towards which Vermeer was changing when he died. Five of this artist's pictures were shown at the Hudson-Fulton Exhibition. The one in the Altman Collection has suffered seriously through cleaning and restoration, and is not so fine as the subject of this gravure.

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IN THE METROPOLITAN MUSEUM OF ART, NEW YORK

SALOME, BY REGNAULT

Henri Regnault

FIVE

THIS picture, "Salome" (sa-lo′-mee), is the masterpiece of a French artist of great promise who was killed in battle at the close of the Franco-Prussian War. Born at Paris, October 30, 1843, Henri Regnault (rane-yoe) was brought up in surroundings where the best of taste reigned, his father being connected with the porcelain establishment at Sèvres (sayvr). He early showed artistic promise, and after three trials carried off the *Prix de Rome* at the age of twenty-three. The income from this prize, together with the additional funds which his family provided, enabled him to travel in Spain and Morocco after he had finished his novitiate at Rome. He had been drawn to the study of oriental color through having come under the influence of Fortuny's work while at Rome, an influence which affected all of his later pictures.

His love of color is well shown in the "Salome." The model was an Italian gypsy girl of the Campagna (cam-pan-yuh), and it was not until the picture was well advanced that this title was given to it. It is hardly as a characterization of the light-footed daughter of Herodias that the painting charms, though the naming was apt. Its attraction lies in the marvelous harmony of yellows, and in its daring reversal of the Rembrandt method. Rembrandt surrounded his light with shadow—here there is the shining black of the toyseled head in the midst of gleaming silk and radiant spangles.

Everything superfluous has been eliminated. What detail there is,—the chest, the salver, the rug, is all in keeping with the design as a whole. No description can do justice to the handling of the textiles, or suggest the accuracy of their values. The marvel of it is how so many tones of yellow could be heaped one upon the other without wearying the eye.

Regnault's death was deeply mourned by his fellow-artists. He was exempt from military duty because of having won the *Prix de Rome*, but at the outbreak of the war he insisted that he was needed, and enlisted as a private in the 60th Battalion. When urged to accept a commission he replied, "I cannot allow you to make of a good soldier an inferior officer." Just a few days before the capitulation of Paris, he was killed in a sortie at Buzenval, January 19, 1871.

Two of his pictures, a portrait of General Prim and the "Execution without Judgment under the Caliphs," are in the Louvre. One of his finest canvases, "Automedon with the Horses of Achilles," is in the Boston Museum of Fine Arts. A study for the Boston picture is in a private gallery in Philadelphia.

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GLEBE FARM, WITH THE TOWER OF LANGHAM CHURCH, BY CONSTABLE

John Constable

SIX

THAT the Metropolitan Museum should have so splendid an example of Constable's style is most fortunate. For it is just the richness and glow of color that are seen in the "Glebe Farm" that make the "Cornfield," the "Hay Wain" and the "Valley Farm" of the London National Gallery so supremely fine. While not so ambitious as these or the much larger "White Horse," shown at the time the paintings of the J. Pierpont Morgan Collection were on exhibition, it is quite in the same class.

Constable's struggle for recognition was long and arduous. After persistent opposition on the part of his fiancée's family, he was married when forty years old. There followed twelve years of happiness; the death of his wife at the end of that time was a blow from which Constable never recovered. His election as an Academician came within three months of her death, but his reply to the announcement was, "It has been delayed until I am solitary and cannot impart it."

Constable was born in Suffolk County, England, June 11, 1776, and lived to be sixty-one years of age. He became a student at the Royal Academy when he was twenty-three. Three years later he exhibited his first picture. Strangely enough, his work was appreciated in France before it won its way at home. He exerted a marked influence upon the rising school of French landscape painters. A medal was awarded him for pictures exhibited at the Salon in 1824, and the next year the "White Horse" won another for him at Lille. During the early years of his career, commissions for portraits were undertaken as a temporary relief to his finances. One of the best of these portraits hangs in the Hearn Collection at the Metropolitan Museum.

Constable's pictures are very uneven in merit, but whether successful or not, there is always evident a sturdy love for nature and a faithful effort to record her moods. He never painted anything but his beloved England, and few of her artist-lovers have surpassed him in depicting her rural beauties. Many of his canvases are as glowing with color as a hillside after a shower. His compositions are seldom grandiloquent, as are some of Turner's, but even Turner did not have a better eye for the dramatic placing of a thunder-cloud. Like Corot, Constable portrayed again and again a few scenes and localities that he knew thoroughly, painting first from one angle and then changing to a new point of view. The sincerity of the artist speaks from even the hastiest sketch. England no longer withholds her admiration for his work; his pictures now command the prices brought by "old masters."

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The Metropolitan Museum of Art, New York

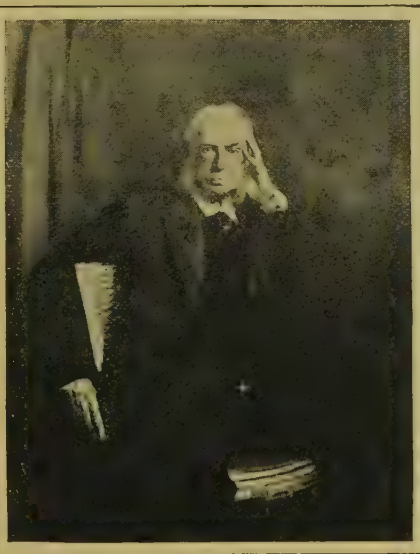
By SYDNEY P. NOE

MENTOR GRAVURES

PORTRAIT OF FEDERIGO GONZAGA
By Francia

OLD WOMAN CUTTING HER NAILS
By Rembrandt

JAMES STUART, DUKE OF LENNOX
By Van Dyck



PORTRAIT OF HENRY G. MARQUAND
By John S. Sargent
Mr. Marquand was the second president of the Metropolitan Museum

MENTOR GRAVURES

YOUNG WOMAN WITH A WATER-JUG
By Vermeer

SALOME
By Regnault

GLEBE FARM, WITH THE TOWER OF LANGHAM CHURCH
By Constable

NOTE.—In choosing the illustrations for this number, we have selected, for the most part, pictures that have not been reproduced in The Mentor heretofore. The Mentor has drawn largely on the Metropolitan Museum for illustrations, many of the well-known masterpieces there having been reproduced in one number or another. A list of Metropolitan Museum pictures already published in The Mentor will be supplied on request.

THE Metropolitan Museum of Art, among all the art collections in our country, undoubtedly has the best claim to first importance, and is becoming more and more a place of pilgrimage for the hosts that visit New York each year.

The Metropolitan Museum has grown so that it is no longer to be compassed in a morning visit. The pictures alone require more than that, many times more, and they form but one department. Much greater benefit will come from part of a day or a whole day spent with a single school of painting. As far as possible, this is the way in which the pictures are hung, but several bequests have been conditional upon their being kept intact, and a trip from one end of the building to

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the other is sometimes necessary to compare pictures by the same artist. The paintings now owned number about twelve hundred. Not all of these are on exhibition, but loaned pictures bring the total to about that figure.

TITUS, SON OF REMBRANDT
By Rembrandt

New York was founded by the Dutch, and it is a singular coincidence that the Dutch School is the strongest at the Metropolitan Museum. Both Hals and Rembrandt, the leaders of this school, are well represented, and in few European museums can Rembrandt and his school be studied to better purpose. Hals was born in 1584, Rembrandt in 1606. Rembrandt worked in Amsterdam, Hals at Haarlem, only fourteen miles away. There are several pictures attributed to Hals, the elder and younger, and the number is sometimes increased by loans. "The Merry Company," in the Altman Collection, is more pretentious than the others, but if it could be hung between the two portraits in the Marquand Room at the head of the main stairway, it would seem garish alongside the masterly treatment of the blacks in the "Portrait of a Man," or the wonderful drawing of the hands in the "Portrait of a Woman."

The pictures by Rembrandt and his school are the chief glories of the Museum—no less than sixteen pictures are attributed to his hand. In an earlier number of The Mentor, Rembrandt's three styles have been clearly distinguished. It is to the first or "gray" period that the "Portrait of a Man" belongs, and most admirably does it represent the class. "The Man with a Steel Gorget" falls in the middle or "golden" period. The greater part of the pictures belong to the late period—the years in which fortune no longer smiled, and sorrow succeeded sorrow. The portrait of Titus, his son, while still a lad, must have come early in this period, and before troubles thickened. A few years later comes the "Old Woman Cutting Her Nails," hailed by many as the finest of the Museum's Rembrandts, but different from anything else by him there. Hanging beside it is the "Lady with a Pink"—a portrait with an overpowering sense of reserve

WHEATFIELDS. By Jacob van Ruisdael

force. What luminous shadows and what living color it has! So also with its companion piece, though to a lesser degree. Compare them with the two portraits of men in the Dutch Room at the other end of the building. They too come in the late period. What tremendous dignity and poise show forth from these canvases!

Gerard Dou (dow) worked under Rembrandt in the "gray" period. The small, crisp "Portrait of the Artist" shows his change of style after leaving the studio. Dou trimmed his sails to catch the wind of fashion, a thing that Rembrandt refused to do. Another pupil, Nicolaes Maes, worked with Rembrandt during the "golden" period. He gives us a brilliant piece of color, a "Young Girl Peeling Apples," in which the glow of red warms all the panel. Aert de Gelder portrays a sturdy "Dutch Admiral," and there is one of the far-stretching Dutch landscapes by Philip de Koninck.

A VISIT TO THE NURSERY. By Gabriel Metsu

Dutch Masters

The "Little Masters of Holland" are present in strength. Metsu's "Visit to the Nursery," which came from the Morgan Collection, is his masterpiece. It is an intimate glimpse of home life that attracts everyone, and is painted with a mastery that strengthens its human appeal. But Metsu is far surpassed by Vermeer. Less than two score of his pictures are known; the Metropolitan Museum already owns two of them, and of these, the "Young Woman with a Water-Jug," is of first rank.

The landscape men should not be overlooked. Cuyp (koip) has three of his cattle pictures, filled with sunlight; and Hobbema, one of the rarest-met of the Dutchmen, has a view of a Dutch village. "Wheatfields," by Jacob van Ruisdael (rize'-dale), shows him at the summit of his powers. It is superior to anything by him to be found in the European collections. With its low-lying horizon and broad sky, it is typical of the best in the Dutch treatment of landscape.

PORTRAIT OF A MAN
By Dirk Bouts

Next to the Dutch, the Flemish is the one best represented among the older schools. High finish and purity of color are the chief characteristics of these careful brushmen. There is a tiny fragment by Jan van Eyck (ike) (?-1440), usually identified as a portrait of Thomas à Becket. A

monumental "Annunciation" is by Roger van der Weyden, with rich velvets and brocades and careful painting of details. In the Altman Collection there are four panels by Memling. All are of superior quality—in fact, the "Portrait of an Old Man" was for a long time attributed to Jan van Eyck. Another portrait, by Dirk Bouts, has the same directness and force, and is almost equally fine. This is portraiture of the highest order.

Rubens (1577-1640) brought a new spirit to the school. One may obtain at the Metropolitan a fairly clear idea of his power and of the influence of his style upon his fellow-artists, although there are none of his finest creations present. Rubens relied upon the help of his assistants more than most other artists. Indicating his intentions, whether by a small sketch or roughly on the canvas itself, he would leave the carrying out to his pupils, and afterwards correct or retouch the parts that did not satisfy him. The large "Wolf and Fox Hunt" was probably handled in some such way, as were a number of these hunting pictures. The "Holy Family," nearby, is in his first style, and some of Rubens' brushwork may still be recognized in the figure of the Christ-child. Rubens' skill in another field is upheld by two good portraits of men. There are several school pieces† of merit, and an early copy of his "Susannah."

PORTRAIT OF AN OLD MAN
By Hans Memling

Van Dyck, Rubens' best pupil, is even better represented than his master. We may trace his development in no less than eight portraits. Two in the Altman Collection were done during his visit to Genoa, and betray some of the influence of Italy. But Van Dyck hardly ever surpassed the full-length of James Stuart, Duke of Richmond and Lennox.

THE ANNUNCIATION
By Roger van der Weyden

Italian Masterpieces

Most of the masterpieces of the Italian School had been absorbed into Europe's national collections before the Metropolitan Museum entered the field. It is quite remarkable that the present showing is possible, in view of the difficulties in the way. Most of the works of the "primitives"* are fixed on the walls of the palaces and churches of Italy, but there is a scattering of them here. In the case of Pollajuolo's (polla-yoo-o'-lo) "St. Christopher,"

†A school piece is a picture done by a pupil, closely following the style of his master. *The pioneers of a nation's art. In Italy, Giotto and Duccio are the two great primitives.

VIRGIN AND CHILD ENTHRONED WITH SAINTS. By Raphael
Also called "The Madonna of St. Anthony"

the whole wall has been transported. It has great value for the study of fresco technic. An "Epiphany," simple in its appeal, attributed to the School of Giotto (jot′-to), but possibly by Giotto himself, has great charm of color and composition.

One of the most important possessions of the Museum is Raphael's "Madonna of St. Anthony," the gift of Mr. J. Pierpont Morgan. It was painted before the artist had fully developed, and lacks the spirit and brilliancy of his later productions. But study its composition. Note the dignity in the single figures of St. Peter and St. Paul. How exquisitely the adoring angels fill the lunette!* The picture was intended for the high altar, and, in its original position, it would have been possible to see it only from a distance and from below, and not close at hand as now. The central group shows some of the promise so richly fulfilled in the years that followed.

Of the other Florentines, the pensive "Madonna" by Verrocchio (ver-roke′-kee-o) is very attractive, and the Fra Angelico panel and the circular composition by Mainardi should not be overlooked. Neither of the subjects by Botticelli (bot-tee-chel′-lee) conveys a fair conception of his artistic significance, although they are well authenticated. There is a highly finished portrait of Federigo Gonzaga (fed-er-ee-go gon-tha-ga) by Francia (fran′-cha), in perfect preservation. The "Girl with Cherries," now assigned to Ambrogio de Predis, was for a long time thought to be by Leonardo da Vinci (vin′-chee).

There are several large and important altarpieces. One, by Correggio (kor-red′-jo), was painted early in his career. It is rich in coloring and is an important link in his artistic development. On the opposite wall there is an "Entombment" by Moretto of Brescia, a leader in the North Italian School. He is noted for the gray tone that pervades many of his canvases. A "Pieta" (pee-ay′-ta), by Crivelli (kree-vel′-lee), shows tragic power combined with great beauty of color and strength of drawing.

The late Venetian is the most satisfactorily represented of the Italian Schools.

MADONNA AND CHILD
By Andrea del Verrocchio

*The upper, semi-circular portion. The word refers to the half-moon shape of the composition.

GIRL WITH CHERRIES
By Ambrogio de Predis

ST. GEORGE
By Carlo Crivelli

There is an early "Madonna" ascribed to Giovanni Bellini (jo-van′-nee bel-lee′-nee), firm in drawing and harmonious in color scheme, but failing to show the strength to which he attained later in his career. Titian's (tish′-an) portrait of Filippo Archinto (fil-ee-po ar-keen′-to), Bishop of Milan, is fine as a study of character—we must hope that some of the more decorative pieces by Titian will some day be secured. Like most of the portraits painted by Giorgione (jor-jo′-nee), the one in the Altman Collection has suffered from restoration, but anything by this rare painter is priceless. Carpaccio's (kar-patch′-o) mystic "Meditation on the Passion" is very important historically.

There are no less than three canvases by Tintoretto. "A Doge in Prayer Before the Redeemer" came from Ruskin's collection. Though only a sketch, and therefore less finished than the pretentious "Miracle of the Loaves," it is for that very reason the more convincingly Tintoretto's own handling. Paolo Veronese's (pah-o-lo vay-ro-naze′-ee) "Mars and Venus" shows what a late Venetian could do with a subject that gave full play to a love of color and gorgeous textiles. By Canaletto there is a "Scene in Venice" which is unsurpassed by anything that represents him elsewhere. The "Investiture of Bishop Harold" is the finest of several paintings by Tiepolo (tee-ay-po′-lo) in the Museum. There are excellent portraits by Torbido (tor-bee′-do) and Montagna (mon-tan′-yuh), who do not belong strictly to the Venetians. They are much finer in workmanship than pictures sometimes attributed to their more famous brethren.

SCENE IN VENICE. By Antonio Canaletto

Both of the great men of the German School are well represented. Dürer's training as an engraver is very apparent in his "Madonna and Child with St. Anne"—the sleeping Christ-child is delightful. Of the

three Holbeins, the early "Portrait of a Man" is perhaps the best. According to the inscription, it must have been painted when the artist was twenty years old. There are other fine portraits by Cranach (kran'-ack) the elder and Beham.

MARIE MARGUERITE LAMBERT DE THORIGNY. By Largillière

Early English Art

The early English School is strong in numbers—it was greatly strengthened by the Fletcher bequest. The large portrait group of The Honorable Henry Fane with his Guardians shows Sir Joshua Reynolds attempting a group on an ambitious scale. His half-lengths, especially that of Elizabeth Reynolds, are more pleasant—in that particular one he pays tribute to the style of Rembrandt. Gainsborough, Sir Joshua's most successful rival, shows his ability in the portrait of "Miss Sparrow" and, in another field, in the "Landscape" in the Hearn Gallery. He used to paint these landscapes as relaxation from the portrait pieces. Romney and Opie (o'-pee) have attractively pictured Lady Hamilton for us. One of the best pictures that ever came from Lawrence's brush is his portrait of the Reverend William Pennicott.

PORTRAIT OF A LADY
By François Boucher

There are some good canvases by the landscape men. Constable has an unusual portrait, as well as the gorgeous "Glebe Farm" in the Fletcher Collection. John Crome, in his "Hautbois Common," shows the influence of the principles of the Dutch School. Wilson has an unusually rich "Italian Landscape." Turner, the greatest of the English landscapists, is responsible for three pictures. The early "Saltash" is rich and luminous; the "Grand Canal, Venice," is one of the best of his pictures of the island city, and the "Whale Ship" is in his late style. There are some wonderful water-colors by him on loan.

ARABS CROSSING A FORD. By Eugène Fromentin

The French School of the seventeenth and eighteenth centuries is represented by pictures few in number, but excellent in quality. Boucher (boo'-shay), Largillière (lar-geel'-yare), Nattier (nat'-ee-ay), Drouais (droo'-ay)—all these men show amazing

strength on the decorative side, and, always, exquisite taste. Chardin (shar′-dahn) has a beautiful low-toned still-life, "Preparations for a Breakfast." David's portrait in the Fletcher Gallery is a marvel of directness. In the Morgan Wing there are eight decorative landscapes by Hubert Robert well worth looking up in this connection.

Modern French Artists

Some of the modern French artists were appreciated by Americans before their genius was recognized at home. Certainly the Modern French Section is one of the strongest in the Museum. Romanticism, realism and impressionism are all to be seen in the work of their chief exponents. An afternoon might profitably be spent with the men of Barbizon (bar′-bee-zong). Corot's (kor′-ro) poetic outlook upon nature is plain in each of twelve landscapes. The "Lane Through the Trees," with a sense of cool shadow after the heat of a dusty road, is perhaps the best of them.

ENGLISH LANDSCAPE. By Thomas Gainsborough

Rousseau (roos-so) speaks a more rugged and direct language in the fifteen subjects by him. The sober "Gorges d'Apremont (gorge da′-pre-mong); Evening," with a still luminous sky above the hills, is magnificent. Millet (mee′-yay) is represented by the famous "Sower," with its rhythm and swing, an almost equally fine "Water-Carrier," the impressive "Autumn" in the Fletcher Collection, and half a dozen others. Dupré (dyu′-pray) and Diaz (dee′-ath) have good pictures, and when has Troyon ever surpassed his superb "Holland Cattle"? Daubigny (daw-been′-yee), though he comes a bit later, is usually associated with these men. There are eight or nine of the subjects he used to find in punting about among the streams and back-waters of

LANDSCAPE WITH FIGURES. By George Morland

LADY WILLIAMS
By Ralph Earle

BOY WITH A SWORD
By Edouard Manet

the Seine (sane) and Oise (wahz)—how intimate they seem!

The Museum is fortunate in owning a number of pictures that are recognized as the masterpieces of their respective artists. Bastien-Lepage's (bas-tee-en lah-pazsh') "Joan of Arc" is one of these. Realism?—yes, but so combined with imagination that the result is gripping. Rosa Bonheur's "Horse Fair" is one of the best-known pictures in the Museum. Many are familiar with it in black and white reproduction, in which it shows to good advantage. The original painting is somewhat disappointing in color. Meissonier's (may-sone-yay) "Friedland, 1807" is an example of his careful brushwork, but is less successful than some of his smaller panels that are shown in the Museum. Regnault's (rane'-yoe) "Salome," a daring harmony in yellow, shows the dancer awaiting her reward from Herod. "Madame Charpentier (shar-pen'-tee-ay) and her Children," by Renoir (ren'-wahr), is one of the most charming groups to be found anywhere. Renoir employed the methods of the impressionists, but he never allowed his subject to become secondary to the medium—a thing his brother-impressionists sometimes seemed to do. There are pictures by the other exponents of these principles to speak for themselves, and some of them speak very well. Manet (mah-nay) in the "Boy with a Sword" is following Velasquez to good advantage. A portrait by Fantin-Latour (fahn'-tang-la-toor') depicts the wonderfully sensitive face of a lady in black. A turquoise brooch gives a piquant touch of color that is repeated in the other jewels she wears. There are many other pictures that one could ill afford to pass by—Couture's "Day Dreams," for example, and "Arabs Crossing a Ford" by Fromentin (fro-mahn-tang), or the pictures by Delacroix (del-lah-krwah), Courbet (koor-bay), Jacque

LANDSCAPE. By Charles François Daubigny

(zshock), and Dagnan-Bouveret (dahn′-yahn-boo′-ver-ray), to mention only the more important. Last, but far from being least, is the group by Puvis de Chavannes (poo′-vee de sha-van′) to show the power of that great mural painter.

FORENOON, ADIRONDACKS. By Alexander H. Wyant

American Artists

Naturally, American artists are well represented in the Metropolitan Museum. Nine pictures stand sponsor for Gilbert Stuart's skill, and several are surprisingly fine. Such work as John Singleton Copley's "Mrs. Bowers" and Stuart's "Mrs. Anthony" do not suffer from comparison with the productions of the English School of their time. Indeed, Ralph Earle's "Lady Williams," sometime previous to its purchase in London, masqued as a Gainsborough! Its simplicity and slightly awkward directness are captivating. Do not fail to observe, however, that the table accessories are exceedingly well painted. One of the most interesting of these early pictures is a group of pupils in the studio of Benjamin West. As president of the Royal Academy, his aid was sought by almost every American with any artistic ability who could obtain passage money to London. Matthew Pratt, one of those whom West helped, here shows him criticizing the sketch of one of a group. Prominent among the men of the next generation is Morse, the inventor of the telegraph, but also a painter of no mean order, and the author of good portraits of Henry Clay and De Witt Clinton. Sully, another man of exceptional taste for his time, has ten pictures, including the sketch for his portrait of Queen Victoria.

MARBLE QUARRY AT CARRARA. By John S. Sargent

Nowhere else can the "Hudson River School"* be studied so well. To our eyes these beginnings seem a bit hard and crude, but such canvases as F. E. Church's "Heart of the Andes" and "Parthenon" are really impressive. But most of these men interest us today chiefly as the forbears of a later group. Inness,

*The Hudson River School of Art is considered at length in Monograph Six, Mentor No. 136, "The Story of the Hudson."

Wyant, Homer Martin and Blakelock have only a point of view in common, and yet they form a transition group that leads out of the "Hudson River School" to the landscape men of the present day. In no other gallery is the work of these four artists so well represented. In some of the canvases the inspiration of the Barbizon men is very apparent. Inness succeeds best, perhaps, in his oft-reproduced "Autumn Oaks" or his "Delaware Valley." Wyant's work is very even—"An Old Clearing" is the best of his ten pictures. Blakelock's "Pipe Dance" is fine in a very different way. Homer Martin, perhaps the most interesting figure of them all, reached his highest level in the "View on the Seine," or as his wife named it, "The Harp of the Winds." That picture may fairly claim to be the best-known and most loved landscape by any American artist. His sight was almost gone when the last touches were added. No less impressive, to some, is his "Sand Dunes, Lake Ontario." All the desertedness and barrenness of the dunes seem to have been caught and expressed on his canvas.

Sargent, Whistler, La Farge, Chase—all are here, and in many phases. Sargent's portraits are fine, but do not miss his water-colors, or his "Marble Quarry at Carrara." Winslow Homer was one of the first Americans to realize the possibilities of the sea as a subject, and there are eight paintings by him, as well as a dozen forceful water-colors. Carlsen, Dougherty (dock′-er-tee) and Waugh (wah) are sea-lovers too. And as for the figure-painters, Dannat's (dan′-nah) "Quartette," Abbey's "Lear" and Mary Cassatt's "Mother and Child" should not be omitted. Among the landscapists come Twachtman and Tryon, Groll with his Arizona mesa, Lie with "Culebra Cut" for his subject, and Ben Foster with a fine "Late Summer Moonrise." Here is a rich assemblage of American art.

SAND DUNES, LAKE ONTARIO. By Homer Martin

SUPPLEMENTARY READING

THE ART OF THE METROPOLITAN MUSEUM OF NEW YORK *By David C. Preyer*

WHAT PICTURES TO SEE IN AMERICA *By Lorinda M. Bryant*

A HISTORY OF THE METROPOLITAN MUSEUM OF ART Issued by the Museum. *By Winifred E. Howe*

CATALOGUE. Issued by the Museum.

***Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

THE METROPOLITAN MUSEUM OF ART, NEW YORK CITY

THE story of the Metropolitan Museum of Art begins with an address by John Jay before a company of Americans at a Fourth of July dinner in Paris in 1866. In the course of his address Mr. Jay stated that "it was time for the American people to lay the foundation of a national institution and gallery of art." This suggestion commended itself to a number of notable American gentlemen who were present, and who formed themselves into a committee for inaugurating the movement. This committee subsequently addressed an appeal to the Union League Club of New York City, urging the importance of founding a permanent national gallery of art and museum of historical relics for the benefit of the people at large, and suggesting that the Union League Club might properly institute the means for promoting this great object.

Mr. Jay, on returning home from Paris, was elected president of the Union League Club, and the letter from the committee came up for his own official notice. The result was a meeting at the Union League Club on November 23, 1869, to consider the founding of a museum, and a committee of fifty, made up of some of the most distinguished men of the day, was appointed to carry out the project.

It is interesting to read today that the sum of money that the founders placed before them as the goal of their ambition with which to establish this great art institution was only $250,000—a sum $100,000 less than the present administration's expenses for one year. And yet this distinguished committee, after more than a year's effort, raised less than half of the desired sum—only $106,000. Such, financially, was the modest beginning of the great Metropolitan Museum which now, besides its extensive buildings and its priceless collections, has an endowment for a purchase fund of over ten million dollars.

The idea of locating the art museum in Central Park originated with Andrew H. Green, known as the father of that great park. From 1870 until 1879 the Museum was housed, first on Fifth Avenue, and then on Fourteenth Street. The original building, in Central Park, was completed in 1880, and was opened by President Rutherford B. Hayes. Additions were erected in 1888, 1894 and 1902. Since then more contributions have been made to the complete plan which, when realized, will comprise a group of buildings that will cover an area of 18½ acres, and will cost about $20,000,000. The architects were Calvert Vaux, then Theodore Weston, Richard M. Hunt and McKim, Mead & White. The Museum had first to rely largely upon voluntary service. This ended in 1879 with the election of a salaried director, General di Cesnola. At his death, in 1904, he left a valuable memorial in the collection of antiquities that he gathered together while United States consul in Cyprus, and which includes over 30,000 specimens. A new era in the affairs of the Museum began with the election of Mr. J. Pierpont Morgan as president. Under Mr. Morgan's presidency the Metropolitan became one of the richest museums in the world, and on his death, in 1914, it received for exhibition his great collection of art objects, valued at $50,000,000. Of this, the greatest private collection in the world, a large part has now become the property of the Museum through the princely gift of Mr. Morgan's son, the present J. Pierpont Morgan, and is being installed by itself in a wing called the Pierpont Morgan Wing. The Museum has been the recipient of many large endowments, and many fine private collections. Notable among the benefactors may be named three of New York's most distinguished merchants, A. T. Stewart, James A. Hearn and Benjamin Altman.

During its existence many of the most prominent citizens of New York City have been connected in some active capacity with the Museum. The past presidents of the Institution were John Taylor Johnston, Henry G. Marquand, Frederick W. Rhinelander and J. Pierpont Morgan. Mr. Robert W. de Forest, for many years secretary of the Museum, is now its president. Among the vice-presidents were William Cullen Bryant, Andrew H. Green, General John A. Dix, A. T. Stewart, John S. Kennedy, D. O. Mills, Joseph H. Choate, and others. The affairs of the Museum were directed during the first years by General di Cesnola, then by Sir Casper Purdon Clarke, and now by Mr. Edward Robinson.

Under the direction of the present secretary, Mr. Henry W. Kent, the history of the Metropolitan Museum has been written by Winifred E. Howe, and published in a luxurious volume of 360 pages. This beautiful book affords a most interesting and instructive lesson in what can be accomplished in less than fifty years in the development of a great art institution.

W. D. Moffat

EDITOR

FANEUIL HALL, BOSTON, MASS.—"THE CRADLE OF LIBERTY"

"In old Faneuil, that guild temple of traders and aldermen, butchers and clerks, hucksters and civic magistrates, the spirit of the people conceived an embryonic nation."

AMONG early Bostonians who owned argosies and had a prosperous trade with France and England was a young bachelor named Peter Faneuil, who, like Paul Revere, was descended from Huguenot refugees. He was the heir of his uncle, Andrew Faneuil, who died in 1738 and left a large fortune. Fond of good living and hospitable, "Here's to Peter Faneuil!" was the toast often proposed above brimming bumpers. From Madeira he ordered amber wine, from London, chariots and sets of crested harness, and fine stuffs, buttons and laces. His ships carried cargoes of tobacco, black walnut, fish, stoves and general merchandise. At forty years of age he was a prince among Colonial merchants. He had, moreover, pride in Boston's advancement, and offered "at his own cost and charge" to build a market for "the use, benefit and advantage of the town." Later, the donor of the market house instructed his architect, the renowned John Smibert, to add a hall above the space given over to provisioners' stalls. In 1742 the two-story brick building was completed. When Peter Faneuil received the formal thanks of Boston, he made the prophetic response, "I hope what I have done will be for the service of the whole country." A year later he died, and was buried in the Granary Burying Ground.

The chamber over the market became the seat of public offices, and, as the Town Hall, was in demand for patriotic celebrations, debates and banquets. In 1761, all of the structure except the walls was destroyed by fire. As no benevolent townsman offered to duplicate Faneuil's gift, the selectmen were empowered to raise the necessary funds for rebuilding by holding a lottery. "Faneuil Hall Lottery Tickets" bore the signature of John Hancock, then a young politician of promise. In 1763 the reconstructed Town Hall was ready for occupancy. It was this rebuilt meeting-place that became the forum of free speech in Boston, the Altar of Liberty from which rose the flame that "roused a depressed people from want and degradation. Here those maxims of political truth which have extended an influence over the habitable globe, and have given rise to new republics, were first promulgated."

The Stamp Act (1765) was denounced within its arched and pillared walls, and the repeal celebrated with festivities. Revenue laws were discussed, and when troops were ordered to the provincial capital, a convention in session here raised a fearless voice in defence of Colonial independence. The day following the massacre of the fifth of March, 1770, a mass meeting was called in the Hall, but so many citizens responded that it was necessary to repair to Old South Church, where there was more room. Early in November, 1773, John Hancock presided over a Town Hall meeting, the object of which was to protest against threatened importations of tea by the East India Company of London. At numerous conclaves the tea question continued to agitate the grave townsfolk, until on December sixteenth a group of patriots in the disguise of Indians summarily put an end to discussion by dumping the cargoes of the newly-arrived tea ships into Boston harbor.

Faneuil Hall echoed to vigorous protests against the Port Bill, which so vitally affected Boston commerce, and from the same "Old Faneuil" printed letters were dispatched to the other colonies for the purpose of presenting facts and securing coöperation against proposed aggressions by the mother country. At Faneuil Hall representatives of General Gage assembled one tragic day to receive the arms of the Bostonians. In joyous contrast were the meetings held in the honored edifice after the evacuation of the city by British troops.

French naval officers and the Marquis de Lafayette were feasted here; two presidents, George Washington and John Adams, were guests of honor at Faneuil Hall banquets; and in 1793 the execution of Louis XVI was celebrated by sons of freedom who sympathized with the French Revolutionists.

In the year 1806 the sturdy building was remodeled and enlarged. During the naval war with England, citizens again held meetings in the Town Hall to inveigh against renewed violations of their "national rights and sovereignty." In the "Cradle of Liberty" Charles Francis Adams, Daniel Webster, Wendell Phillips, Edward Everett, Rufus Choate and Charles Sumner championed justice and democracy. In 1834, at a memorial meeting for Lafayette held in Faneuil, Edward Everett delivered one of his most glowing and eloquent orations, in which he extolled the departed French patriot as the "Lover of Liberty." Referring to the Hall in which he spoke, he said, "The spirit of the departed is in high communion with the spirit of this place."

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OLD NORTH CHURCH, BOSTON, MASS.—ASSOCIATED WITH THE RIDE OF PAUL REVERE

THOUGH Paul Revere performed bravely and well numerous patriotic duties assigned to him, most early historians of the Revolution forgot even to mention his name in recounting the crucial events of April, 1775. He lives in our memory today chiefly because one valorous deed of his, in that month of valorous deeds, was made the subject of a popular poem. Nearly ninety years after the Ride, Longfellow rescued the Midnight Messenger from oblivion, and gave him a place among Revolutionary heroes.

Apollos Rivoire, father of Paul, was a native of the Island of Guernsey, and came of Huguenot stock. A fugitive in search of freedom, he found a home in Boston, where on January 1, 1735 (new style), the son was born who was to establish in the annals of his country the Anglicized name of liberty-loving French ancestors. Father and son were metal craftsmen and wrought fine tableware, many examples of which are still in existence. Paul was a skilful designer, and a cartoonist of wit and imagination. But of far greater importance to his associates, he was an up-and-ready sort of person, keen for any task that gave vent to an ardent nature—always in the thick of everything. He was a moving spirit in various secret organizations, had an active part in the Tea Party, and because he was bold and dependable was chosen to carry the news of Boston's successful exploit to sympathizers in New York, and speed it on to Philadelphia. Following a ride of Revere's in December, 1774, to Durham and Portsmouth, the provincials secured powder and ammunition from Fort William and Mary that actually saved the day at the Battle of Bunker Hill.

Early in 1775 Revere engaged with other patriots to patrol the Boston streets and keep advised as to the movements of the redcoats. On April 15th they reported the British camp unwontedly astir. The next day, Sunday, Revere took a message from Dr. Warren to Lexington, where Hancock and Adams, on whose heads a price had been set by the king, were lodging. Upon receiving the messenger's news of British activities the adjourned Provincial Congress re-assembled in Concord and began immediate preparation against attack on the colony's stores. Here let us read the account of "the express" himself, an account at variance with the familiar rhymed version, especially in respect to the lantern signals, and his arrival at the journey's end.

"On Tuesday evening, the 18th, it was observed that a number of soldiers were marching towards the bottom of the Common (thus indicating to Revere and his fellow-watchers that the troops were about to leave Boston by water). About ten o'clock Dr. Warren sent in great haste for me, and begged that I would immediately set off for Lexington, where Messrs. Hancock and Adams were. . . . When I got to Dr. Warren's house, I found he had sent an express by land to Lexington, a Mr. William Dawes. . . . The Sunday before. . . . I agreed with a Colonel Conant (at Charlestown, across the river from Boston) that if the British went out by water we would shew two lanthorns in the North Church steeple; and if by land, one, as a signal. . . . I left Dr. Warren, called upon a friend, and desired him to make the signals. . . . Two friends rowed me across Charles River, a little to the eastward where the *Somerset* man-of-war lay. . . . I met Colonel Conant, and several others; they said they had seen our signals. . . . I set off upon a very good horse; it was then about eleven o'clock, and very pleasant." It is plain that the signals were not for the messenger, as related by Longfellow, but were intended to flash the intelligence to the people and militia that the British were advancing.

Revere was in constant danger of being overtaken by the entire force, which had embarked at Boston almost at the moment he was reaching the Charlestown shore. Riding at top speed he reached Medford. "I awaked the captain of the Minute Men; and after that I alarmed almost every house, till I got to Lexington. I found Messrs. Hancock and Adams at the Rev. Mr. Clarke's; I told them my errand, and inquired for Mr. Dawes."

When the latter arrived, the two set out for Concord, six miles distant. On the road they were overtaken by a young Dr. Prescott, and all three proceeded to wake the sleeping households along the highway. Suddenly, Revere, riding ahead, was surrounded by four armed redcoats. With William Dawes he was forced into a pasture and detained, while Dr. Prescott, "jumped his horse over a low stone wall, and got to Concord." Revere was led back toward Lexington, but at the sound of guns his captors seized his mount and let him continue alone on foot. In Lexington he saved important papers of Hancock's, and witnessed the first exchange of shots between the provincials and the British.

"Old North Church," Boston, still stands on the original ground where it was erected in 1723. From "the highest window in the wall" the sexton hung the warning lights. The face of the tower bears a tablet to the memory of the dauntless and resourceful Messenger of Liberty.

"Through the gloom and the light
The Fate of a nation was riding that night;
And the spark struck out by that steed, in his flight,
Kindled the land into flame with its heat."

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THE LINE OF THE MINUTE MEN, LEXINGTON, MASS. .

THREE

DURING the years immediately preceding the conflict on Lexington Green, the temper of the Colonials was sorely tested by persecutions instigated by Tyrant George III—"the Stamp Act, its repeal, with the declaration of the right to tax America; the landing of troops in Boston, beneath the batteries of fourteen vessels of war, lying broadside to the town, with springs on their cables, their guns loaded, and matches smoking; the repeated insults, and finally the massacre of the fifth of March resulting from this military occupation; and the Boston Port Bill, by which the final catastrophe was hurried on." Delegates were appointed to the Continental Congress; at Salem the Provincial Congress was formed in October, 1774. At Concord and Cambridge the latter assembly enacted measures providing for troops, officers and stores. Early in the year 1775 it was clear that the crisis was at hand. General Gage betrayed his intentions when in March he caused the stone walls to be leveled that divided the fields about Boston, and so made these peaceful pastures ready for battle. His spies obtained information as to the amount of provisions hoarded at Concord and Worcester. On the fifteenth of April patriots in Boston were convinced that the plans of the British were mature, and an attack on Concord was imminent. By advice of Hancock and "Sam" Adams the stores were distributed among neighboring towns. Colonel Revere delivered his first warning, and "at length the momentous hour arrived, as big with consequences to Man as any that ever struck in his history."

Though British officers were ignorant of the means by which Gage was to assail American freedom, the provincials already knew, and were prepared. The lanterns in North Church tower had signaled their message to watchers in Charlestown, and Revere and Dawes were already on their separate ways, when eight hundred grenadiers and light infantrymen landed at East Cambridge and crossed the marshland to the road that led to Lexington and Concord. At dawn the Minute Men were alive to the warning given by bells and drums that the enemy was approaching; three score or more answered the call to arms on Lexington Green—"a little band of farmers on their own training-field, facing the veteran ranks of the king. . . . Their homes, their property, personal and communal, and their rights as freemen were threatened; they were patriots and heroes, everyone."

Commanded with threats and oaths to lay down his arms, Captain Parker of the militia cried to his men: "Don't fire unless you are fired on; but if they want a war, let it begin here." In the ensuing assault several militiamen fell, wounded to the death. The blood they spilled baptized the cause of Freedom in a new land. Resolved to die rather than submit, their martyrdom fixed the resolution of all their brothers in the Colonies.

Here, three-quarters of a century later, in "the birthplace of American liberty," Louis Kossuth, the Hungarian patriot, eulogized "the embattled farmers" of immortal memory in these eloquent phrases: "It is their sacrificed blood in which is written the preface of your nation's history. Their death was and ever will be the first bloody revelation of America's destiny, and Lexington the opening scene of a revolution destined to change the character of human governments, and the condition of the human race."

"The Minute Man of the Revolution!" exclaims George William Curtis. "And who was he? He was the husband and father, who left the plough in the furrow, the hammer on the bench, and, kissing wife and children, marched to die or be free! . . . This was the Minute Man of the Revolution! The rural citizen, trained in the common school, the town meeting, who carried a bayonet that *thought*, and whose gun, loaded with a principle, brought down, not a man, but a system!"

A youth who fought the king's men that wonderful day described how they pushed the British back from Concord Bridge, back through Lincoln, Arlington, Cambridge and Somerville to the Charles. "What could be more pleasing to ambition," he wrote, "than to knock off the shackles of despotism? Freedom was the hobby I mounted, sword in hand, neck or nothing, life or death. I will be one to support my country's rights and gain its independence!"

"What was the matter, and what did you mean in going to the fight?" one of a later generation asked a veteran of Concord. "Young man," was the reply, "what we meant in fighting was this: We always had been free, and we meant to be free always."

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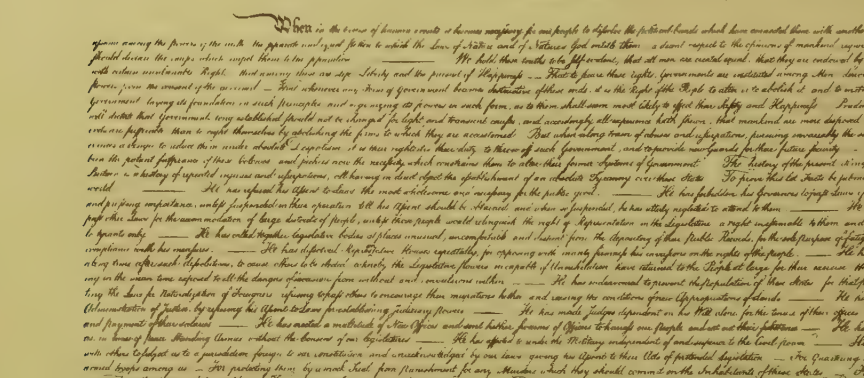
SIGNING THE DECLARATION OF INDEPENDENCE

IN CONGRESS, JULY 4, 1776

The unanimous Declaration of the thirteen united States of America,



THE DECLARATION OF INDEPENDENCE is here reproduced in miniature —not for reading purposes; that would be too severe a tax on the eyesight—but simply to show the form and style of the historic Document. The original of this Document is preserved in the Department of State, Washington, carefully protected against light and air.

As may be seen, the Declaration bears the date July 4, 1776, and this is accepted as the Birthday of Independence. On July 3rd and 4th the Declaration was debated and the convention voted in favor of it, and authorized the presiding officer, John Hancock, and the secretary, Charles Thomson, to sign the Document. There was no single hour during which all signed. It was a matter of weeks. All came to it finally, for, as Benjamin Franklin shrewdly observed, "We must all hang together, or else we shall all hang separately."

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IN INDEPENDENCE HALL, PHILADELPHIA, PA.

THE LIBERTY BELL

THE Philadelphians, having outgrown the primitive "Towne House" that had served the community's needs since 1709, undertook in 1729 to erect an Assembly building commensurate with the growing importance of the province. A dozen years later the new State House was completed, including the dignified chamber now famous as the Hall in which the Declaration of Independence was discussed and received its first signatures. Another decade passed before sufficient funds were available for the rearing of a frame steeple on the south side of the building, "with a suitable place thereon for hanging a bell." To grace this steeple and call together the Provincial Fathers, whose meeting-place was in one of the rooms below, it was decided after prolonged discussion that a bell be ordered from England. A letter dated November 1, 1751, was forthwith dispatched from the Superintendents of the State House to the Colonial agent in London, asking that he purchase "a good bell, of about two thousand pounds weight, the cost of which we may presume may amount to about one hundred pounds sterling, or, perhaps, with the charges, something more. . . . Let the bell be cast by the best workmen, and examined carefully before it is shipped, with the following words well shaped in large letters around it, viz:

> 'By order of the Assembly of the Province of Pennsylvania, for the State House in the city of Philadelphia, 1752.'

And underneath,

> 'Proclaim Liberty through all the land, to all the inhabitants thereof.—Levit. XXV. 10.'"

Within a year a ship bearing the new bell was reported at the water-front, and eager citizens thronged the pier hoping to see it. The arrival of the State House bell, destined none knew to what great mission, was the chief interest of that August day in Quaker Philadelphia. To the chagrin of the Superintendents they were compelled to announce a few days later that the long-looked-for bell had "cracked by a stroke of the clapper without any other violence, as it was hung up to try the sound." Two "ingenious workmen" essayed to recast the metal, to which a larger proportion of copper had been added, and in April, 1753, artisans raised the "American bell" to its place in the steeple. Later on it was cast again, because the metal composition was now thought to contain too much copper. The result, we are told, was but tolerably successful. However, this "new great bell" continued in service for over sixty years. It announced the convening of the Assembly and the courts, and for a time was used to summon church-goers on Sunday.

The voice of the bell joined in joyful celebration with that of the people when the odious Stamp Act was repealed; late in the year 1773 it witnessed the agitated remonstrances of the inhabitants against the proposed importations of taxed tea. On September 5, 1774, the First Continental Congress convened in Carpenter's Hall, Philadelphia. It convened again the following May in the State House, and paved the way to the Declaration of Independence. When the Battle of Lexington was reported on an April day, the State House bell summoned to the historic enclosure called the "Yard" a company of eight thousand people, determined to defend "with arms their lives, liberty and property, against all attempts to deprive them of them."

Matters were hurrying to the breaking-point when in June, 1776, the State Assembly received the resolutions of the General Convention of Virginia, which forecast in sentiment and wording the final Declaration. Two days later the National Assembly, also in session at the State House, took the first step toward the Colonies' Magna Charta when the resolution was read and seconded "That these United Colonies are, and of right ought to be, free and independent states." A committee on the Declaration of Independence was chosen; July second the "Resolution respecting Independency" was confirmed by representatives of all the colonies except New York. For two days it was debated, on the evening of the fourth day of July it was passed, and the next day it was officially promulgated. On July eighth the Declaration of Independence was read from a balcony in the State House square, and the bell, which for a quarter of a century had awaited this moment to fulfill the prophecy of its Biblical quotation, proclaimed free and independent the Colonies of America.

The bell's period of service was finally closed exactly forty-nine years after that day of rejoicing, when in tolling for the death of Chief Justice John Marshall its sides again cracked. It was then removed from the steeple, and now remains a monument in Independence Hall to the days when American Liberty was young.

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FROM A PHOTOGRAPH TAKEN IN INDEPENDENCE HALL.

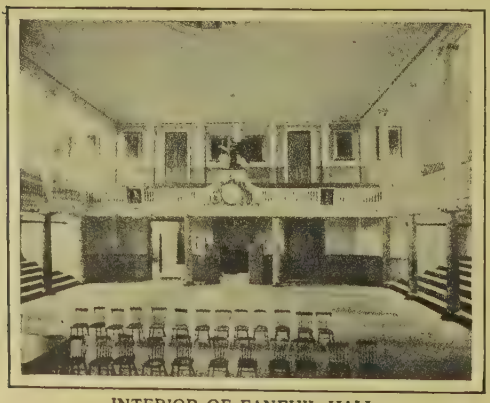
CHILDREN OF LIBERTY

state, everyone going armed, as becomes a race renowned for its preparedness. The bees, however, are monarchists, who will fight and die for a sovereign queen whom they have never seen. So, at the opposite pole from the care-free, house-free—and often food-free savage, we may find a mass of individuals clustered in an empire, and obedient to the scepter or the nod of a personal sovereign.

Why do men with minds and wills accept personal sovereigns? Many times for safety. The beginning of kings is the soldier-chief, that "man on horseback," who has been the destruction of commonwealths, and yet has founded many states,—first conqueror and then despot. As Daddy Smith said in the Massachusetts ratifying convention of 1788, in describing the social disturbances of Shays' Rebellion, "Our distress was so great that we should have been glad to catch at anything that looked like a government for protection. Had any person that was able to protect us come and set up his standard, we should all have flocked to it, even if it had been a *monarch*, and that monarch might have proved a tyrant, so that you see that anarchy leads to tyranny, and better have *one* tyrant than so many at once."

PLYMOUTH ROCK
The granite boulder enclosed by this memorial shrine is a fragment (broken off in 1774) of the large flat rock where the Pilgrims landed—which lies near the sea and is now covered by a wharf

FANEUIL HALL IN 1789
The second Faneuil Hall. As rebuilt after the fire of 1761



INTERIOR OF FANEUIL HALL

Ancient Despotism

One would expect to find the cradle of liberty in the cradle of the civilized human race, that is in that once wealthy valley of Mesopotamia. Whatever the previous organization of family or tribe or clan, the earliest organized states of which we have a record were the mighty empires of Babylon and Assyria, the closest-knit monarchies of history, whose kings compared themselves with divinities and were worshiped as gods. What

opportunity was there for the individual? The Great King lived in one world and all his subjects in another. The Assyrian sculptures tell how Sargon and Assurbanipal relieved the oppressed that ventured to strive for home rule! Shattered, pierced, impaled, these aspirants for liberty served to illustrate the absolute power of their masters. Yet despotism proved then, as it will in future prove, that when liberty is strangled, power departs; for all those vast empires fell before the armies of other invaders and conquerors.

Throughout later history the same effort has been made to corral human beings into a nation controlled over their heads by self-appointed rulers. Many dynasties began their power by seizing the citadel, destroying the freedom of their subjects, raising an army that should depend on them for pay and honors, and thus founding a lineage of sovereigns, who presently began to call themselves "Kings by the grace of God." What mattered it that Dionysius, self-appointed Tyrant of Syracuse, built temples to the gods, offered splendid prizes for horse races, and rewarded sculptors? Did he not at the same time plunder and oppress his fellow-citizens, and murder his critics? With all his splendor he was a paltry adventurer, a thief, a usurper, a robber of liberty!

OLD STATE HOUSE, BOSTON, MASS.
Erected in 1748, and now under the guardianship of the Bostonian Society

Beginnings of Liberty

The spirit of the tyrant has infuriated thousands of chieftains, despots, princes, dukes, sultans, monarchs, sovereigns and emperors, all the way through history; and all the way there has been the counterbalancing force of men who would rather die than submit to an absolute master; men who did die to keep their families and friends and countrymen from bondage. The original cradle of liberty was in the hearts of free men and women, in the villages of the Slavs, among the turbulent Goths, in the republics of Greece and Rome, in the mountains, where it is easy for small groups to defend their own valleys and upland plateaus. Even in those communities part of the people often

THE BOSTON MASSACRE, MARCH 5, 1770
The result of an encounter between a British sentry and the crowd
From the engraving by Paul Revere

government and a free parliament. This is not accurate: Both our state and federal governments have borrowed little directly from the British parliamentary governing system. We have made our constitutions while Great Britain had none; we have organized a system of cabinet government, very different from that of parliamentary responsibility; we expanded our suffrage, and England slowly followed on that highway of liberty.

HISTORIC BRIDGE, CONCORD, MASS.
Showing battleground, and, across the bridge, the statue of the Minute Man by the sculptor, Daniel Chester French

The truth is that the present government of Great Britain and the present government of the United States of America, with their personal liberties, both go back to a common source—the English government of the sixteenth and seventeenth centuries. It is a great mistake for us to think of Queen Elizabeth as a sovereign of a foreign country; or of the King James version of the Scriptures as something outside the United States; or of Shakespeare and Milton simply as "British poets." We Americans have the same heritage in everything that was great and glorious in the British Isles, previous to colonization, as those that remained upon the soil, and in many respects we have made more improvement on those old models than our kin across the sea. The English had to struggle for nearly a century, from 1604 to 1688, against their kings, who wanted to turn the clock backward and take government out of the hands of the people. At that time the Colonies were very nearly independent little republics, who loved their English kings in proportion as those sovereigns kept their hands off. Except for the curse of negro slavery, which was allowed to get a firm grip on the body politic, the Colonies down to Revolutionary times were freer, happier and more prosperous than the mother country, and that was the main reason for the Revolution. Why should people who were doing so well in managing themselves continue in the leading strings of a government that saved its democracy in England for the higher classes?

BUNKER HILL MONUMENT
Charlestown, Mass. A granite obelisk, 221 feet high, erected 1825-42 to commemorate the Battle of Bunker Hill, June 17, 1775

The Colonies were not little political heavens. Their ideas of liberty did not extend to Indians, or Negroes, or Quakers. Nevertheless, in the main, they stood stoutly for freedom of

person, freedom of judicial trial, freedom of legislative bodies; and they were about half a century earlier than England in establishing (in the famous Zenger case of 1734) the priceless right publicly to criticize their own governments. John Wise, who was one of them, had a right to say that they "hate an arbitrary power (politically considered) as they hate the devil."

Hartford, the "Birthplace of American Democracy"

The first written constitution in history that was adopted by a people and that also organized a government, "The Fundamental Orders of Connecticut," was drawn up in 1639 by freemen of Windsor, Hartford and Wethersfield. Under this law the people of Connecticut lived for nearly two centuries. The twelve articles it comprised expressed "pure democracy acting through representation, and imposing organic limitations."

PAUL REVERE

"Here is the first practical assertion of the right of the people, not only to choose, but to limit the powers of their rulers—an assertion that lies at the foundation of the American system. It is on the banks of the Connecticut, under the mighty preaching of Thomas Hooker, and in the constitution to which he gave life, if not form, that we draw the first breath of that atmosphere which is now so familiar to us. The birthplace of American Democracy is Hartford."

By common consent, the period when these principles of liberty of person and of government were first clearly impressed on the world was in the American Revolution, which deserves to be called the cradle of modern liberty. When things grew squally in the Colonies, our forefathers insisted that their brand of liberty was better than the British kind, and they began to draw up lists of rights and grievances, especially in the Stamp Act Congress of 1765. The new states of the American Union, as they were organized, bound themselves to observe Bills of Rights containing such stirring principles as that, "All power is vested in, and consequently derived from, the people." "All elections ought to be free,

READING THE DECLARATION OF INDEPENDENCE FROM THE STATE HOUSE, BOSTON

and that all men having sufficient evidence of permanent interest with, and attached to the community, have the right of suffrage."—"The freedom of the press is one of the great bulwarks of liberty."—"All men are equally entitled to the free exercise of religion, according to the dictates of conscience."

ORIGINAL INDEPENDENCE HALL

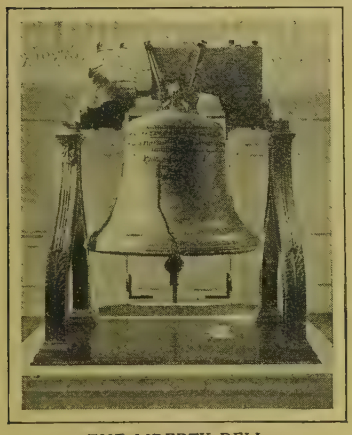
By far the most renowned statement of the noble rights of liberty was the Declaration of Independence. At the time, people were most interested in the classified indictment of the king of Great Britain for interfering with American liberty. The world, however, has long agreed that the big memorable, permanent thing in that Declaration is found in the three magnificent sentences that fulfill the injunction of the Liberty Bell, to "proclaim liberty throughout all the land, to all the inhabitants thereof." Those imperishable sentences are: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness,—That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed,—That whenever any form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness."

INDEPENDENCE HALL TODAY
Chestnut Street front

After all, anyone who can think like Franklin and write like Jefferson could draw up a Declaration of Independence; but somebody had to fight like Washington, in order to demonstrate that a democratic country, resting on principles of liberty, could (with never-to-be-forgotten aid from the French) achieve its own freedom. The lesson of liberty was deeply

learned in France, where the early French Revolution of 1789 basked in the sunshine of American freedom.

Frenchmen read the Declaration of Independence, and framed a "Declaration of the Rights of Man and the Citizen." They adopted for their watchword the three words, "*Liberté, Égalité, Fraternité*," which are inscribed on the public buildings of the present French Republic. Liberty—that is, personal freedom; equality—that is, equal rights before the law; fraternity—that is, brotherhood with other people. The French, like the Americans, made it their bottom principle that freedom was the normal condition of men, and that everybody was entitled to a chance to do what in him lay, provided he did not thereby obstruct the equal privileges of his brother man. With many hesitations, and some errors, the rising nations of the nineteenth century strove to make real those glorious ideas. The Latin peoples of both North and South America all professed liberty. Republics have been set up in Switzerland, in France, in Portugal, in China, in Russia. Virtual democracies are established in the Scandinavian countries, Holland, Italy, Great Britain, and the great British commonwealths of Canada, Australia, New Zealand and South Africa. Even Germany, Austria-Hungary, Bulgaria and Turkey use the forms of popular government to conceal the real refusal of responsibility to the people by their sovereigns.



THE LIBERTY BELL

INTERIOR OF INDEPENDENCE HALL

Room in which Independence was born into a definite Declaration—showing table at which Hancock placed his signature on the historic Document

Constitutional Liberty

After the Revolution came the real test of the whole principle. How could one generation, nurtured in the cradle of liberty, pass that blessing on to its descendants? The solution was found in a system of state and national constitutions wherein, while standing by

THE OPEN LETTER

Man was free to begin with—as free as the beasts of the earth and the birds of the air. Who, then enslaved humanity? Man himself. So when Man seeks liberty, he seeks to free himself from conditions that he has imposed on his own kind—to free himself from "Man's inhumanity to Man." It is Desire—selfish Desire for conquest, possession and control—that has enslaved mankind. The man that seeks liberty, then, should have no place in his breast for greed and selfish desire. If, underneath his feelings of revolt against the Tyrant and the Master, there burns in his own soul the flame of selfish desire, how can he condemn those that aspire to be masters of the world? How would he himself use supreme power if it were his? Would he dominate others with an iron hand, or would he lend his strength to the weak? When a man has answered that question to his own satisfaction, knowing in his soul that he has been truthful with himself, he may justly claim to be a lover of liberty.

ONE OF THE LANTERNS THAT HUNG IN THE BELFRY OF OLD NORTH CHURCH

Now in the possession of the Concord Antiquarian Society

★ ★ ★

Carlyle pictured humanity in the mass as an "Egyptian urn filled with tamed vipers, each one struggling to raise its head above the others." That is a bitter expression of life's struggle—but in the light of history not an exaggerated one. That kind of struggle does not make for liberty. That is a struggle for *supremacy*. Until the desire for supremacy—for conquest and control, be checked in the human soul, that bitter struggle will go on. Don't mistake the meaning of the cry for liberty. Liberty does not mean freedom from subjection for *us* that *we* may master others. It means freedom for all men—everywhere—always. The love of liberty implies the love of humanity—the spirit of true democracy.

★ ★ ★

Some years ago I heard a great leader of our people define democracy. "We observe," he said, "a young man of high social standing making a companion of his washerwoman's son, and we call him democratic. Is he really so? Perhaps the washerwoman's son possesses qualities that would command the attention and respect of every one; perhaps he has tastes in common with the young man. That is not democracy. That is natural selection—like seeking like. It is very easy for a man to be democratic with people he likes. But that is not democracy. *True* democracy is that spirit in a man which makes the welfare of his fellow men a thing vital to him, *whether he likes them or not.*"

★ ★ ★

So it is with the spirit of liberty. It is all inclusive, without taint of selfishness. It does not mean that *I* shall be free to do what *I* choose. It means that *I* consider it vital that *all* men shall be free and that *all* shall enjoy life, liberty and the pursuit of happiness, with due consideration for the rights and privileges of every one. The spirit found expression in the words of George Washington, when, after leading the six-year struggle of America for liberty he was urged by his officers to assume imperial authority. Indignantly rebuking his officers for an idea that he "viewed with abhorrence," he said, in effect, "Let no man ever offer that to me."

★ ★ ★

Today the United States is engaged in the greatest conflict in all history—not for conquest and mastery, not for territory nor advantages in commerce, not for any material gain whatever, but for the simple cause of liberty. As a national cause, liberty was first established by the United States. When America determined on its freedom in 1776, the recording hand of Fate wrote on the pages of History, where the eyes of all kings might read, "*Mene, mene, tekel, upharsin.*" "You have been tried in the balance and found wanting." The passing years have confirmed the judgment. The Divine Right of Kings is under sentence. The day of reckoning is at hand.

W. D. Moffat

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WATER, WILD FLOWERS, WOODS, AND THE ETERNAL SNOW
RAINIER NATIONAL PARK

MOUNT RAINIER NATIONAL PARK

MOUNT RAINIER NATIONAL PARK

Water, Wild Flowers, Woods, and the Eternal Snow

ONE

NEARLY every piece of open ground in Mount Rainier National Park, between the dense forest and the snow-fields, is a wilderness flower garden. As the snow melts under the warmth of the summer sun the wild flowers spring up with astonishing speed. Sometimes, even, the flowers refuse to wait, and force their way through the snow that separates them from their beloved sunshine. "Above the forests," wrote John Muir, "there is a zone of the loveliest flowers, fifty miles in circuit and nearly two miles wide; so closely planted and luxurious that it seems as if nature, glad to make an open space between woods so dense and ice so deep, were economizing the precious ground and trying to see how many of her darlings she could get together in one mountain wreath —daisies, anemones, columbine, erythroniums, larkspurs, etc., among which we wade knee deep and waist deep, the bright corollas in myriads touching petal to petal. Altogether, this is the richest subalpine garden I have ever found, a perfect flower elysium."

Perhaps no man has known or loved the mountain wild flowers better than John Muir, and it is only when we stop to review the wild gardens he has seen during his travels from the Sierras to Alaska, that we can understand the full force of his statement that Mount Rainier National Park is the richest subalpine garden he found.

This fact brings us to a realization of the value of the work that is being done by the Department of National Parks. No land is richer in natural resources, aesthetic and practical, than North America, and yet no people have been more wasteful than the American people. Vast forests have gone up in smoke, millions of edible animals have been slaughtered wantonly, billions of edible fish have been needlessly destroyed, and places of sublime beauty have been ruthlessly marred. But little by little we are becoming educated; an understanding and appreciation of the conservation movement is making itself felt. In this great work our Department of National Parks is playing a principal part, for, in addition to the actual preservation of our forests, and water and animal life, each individual park serves as a gigantic object lesson in conservation to those that visit it.

At this time certain stockmen of the West are making a determined effort to secure grazing rights on some of our parks. "Will the meat thus fattened be cheaper?", I hear the reader say, and the answer is: "Not one cent." Anyone that has seen the havoc wrought by sheep will understand what this means. Forest glades will be turned into barren stretches of dust, springs will become mud-holes, the wild life will flee to cleaner mountain slopes, and for years afterward the effect of the blight will remain. Let us give thanks, then, that the flower-covered slopes of Mount Rainier are in the safe hands of the Department of Parks, and that many other beautiful regions owned by the people are forever safe from destructive hands.

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MOUNT RAINIER NATIONAL PARK

Mount Tacoma-Rainier

TWO

IN dim bygone ages, when man was young on the earth, a line of great volcanoes raised up above the mountain chain that we now call the Cascade Range of Washington. The monarch of these was a huge symmetrical peak, some 16,000 feet in height, that towered above the inland sea that now bears the name of Puget Sound.

As the centuries passed, some two thousand feet of the summit was shattered by numerous eruptions, and the internal fires gradually cooled. The resulting mile-wide crater became the fountainhead of mighty glaciers. These glaciers in turn fed the rivers that watered the vast forests and plains of western Washington, and so in time the Indians that hunted there called the mountain "Tacoma," which means "The Nourishing Breast." No more beautiful or poetically significant name has ever been conferred on a mountain, and no mountain could be more worthy of such a name.

In the year 1790 the Spaniards, entering from the Pacific Ocean, explored the Strait of Juan de Fuca. They spent a month in Port Townsend Bay, and lived for weeks within sight of the great peaks of the Cascade Range. They did not, however, name any of these, though they gave the name of Saint Rosalia to the highest summit of the Olympic Peninsula.

In 1792, Vancouver entered the Strait of Juan de Fuca and, leaving his vessels in Discovery Bay, proceeded in small boats up the long sea-arm he named Puget Sound for one of his officers. As the party approached Port Townsend Bay, Vancouver records that "a very remarkable high round mountain, covered with snow . . . bore S.45E." Later on, in speaking of the mountains now known as the Cascades, he says, "At its northern extremity, Mount Baker bore by compass N.22E.; the round snowy mountain now forming its southern extremity, and which, after my friend Rear Admiral Rainier, I distinguished by the name of 'Mount Rainier,' bore N.42E."

Thus, at a distance of over 100 miles, Vancouver named this grand white summit after a foreigner who never saw the mountain bearing his name, nor the continent on which it is so conspicuous a landmark.

It is not until the year 1853 that we hear of the great peak again, and then it is from the inspired pen of Theodore Winthrop. Concerning his journey from Port Townsend, he writes in his book, "Canoe and Saddle":

"We had rounded a point and entered Puyallup Bay, a breadth of sheltered calmness, when I, lifting sleepy eyelids for a dreamy stare about, was suddenly aware of a vast white shadow in the water. What clouds, piled massive on the horizon, could cast an image so sharp in outline, so full of vigorous detail of surface? No cloud, as my stare, no longer dreamy, presently discovered—no cloud, but a cloud compeller.

"It was a giant mountain dome of snow, swelling and seeming to fill the aërial spheres as its image displaced the blue deep of tranquil-water. Kingly and alone stood his Majesty, without any visible comrade or consort, though far to the north and south his brethren and sisters dominated their realms, each in isolated sovereignty, rising above the pine-darkened sierra of the Cascade Mountains, above the stern chasm where the Columbia, Achilles of rivers, sweeps jubilant to the sea; above the lovely vales of the Willamette and Umpqua. Of all the peaks from California to Fraser River, this one before me was royalest. Mount Regnier (Rainier), Christians have dubbed it in stupid nomenclature, perpetuating the name of somebody or nobody. More melodiously the Siwashes call it 'Tacoma.'"

This, briefly, is the history of the great mountain. What its future will be no man can say, but let us hope that under its ancient Indian name, it may again dominate the blue lowlands as it did before the white man came.

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THE FOREST ROAD, RAINIER NATIONAL PARK

MOUNT RAINIER NATIONAL PARK

THE forests of Mount Rainier National Park are typical of the wonderful forest growth that covers the western part of the State of Washington. From the sea coast to the snow-capped summits of the Cascade Range there is an almost unbroken blanket of evergreen trees. In the lowlands and along the streams one sees the cottonwood, the maple, the alder and other deciduous trees, but as a rule the conifers reign supreme. As the traveler moves inland from the farms and settlements, he enters a land of semi-twilight where even in the summer the air is cool and damp. The trunks of great Douglas firs, some of them more than six feet in diameter, rise like temple columns until, one hundred feet above the forest floor, the branches spread out into a green roof that hides the sky. Among them are the smoother boles of the western hemlock, and when the trail dips downward into some damp river bottom it winds through stands of gigantic cedars. The forest floor in the lowlands is covered with an almost tropical tangle of green things; ferns of every kind run riot, the glossy leaves of salal and Oregon grape hide the ground, the air is heavy with the fragrance of syringa, spirea and dogwood blossoms.

In the higher altitudes, spring is retarded by the slow melting snows, so that by climbing far enough one can usually find a zone where the spring flowers are in radiant bloom.

As we leave the lowlands and begin to climb the foothills of the Cascade Range, the forest becomes more open and the underbrush less dense. Hour after hour the trail leads upward through the forest aisles. Tree trunks, in stately file, form a somber wall through which an occasional shaft of sunshine gleams; the soft rustle of a falling twig or the far-off tapping of a woodpecker is the only sound, and one steps softly and speaks in a half-whisper, as if this were some great cathedral.

Above an altitude of 3,000 feet the forest begins to change. Here and there a cliff lets in the sunlight, and the sound of rushing snow-water comes from every swale. Suddenly the forest ends, and we pass in one step into the brilliant sunlight. A circular meadow surrounded with a dense wall of timber lies before us; above the trees, naked cliffs stand out boldly against higher peaks that gleam with everlasting snow; a stream of clear, sparkling water winds through the meadow, and somewhere in the distance a water ousel is singing its beautiful song. After the solemn grandeur of the deep woods the vivid transition is startling.

As we climb upward from the 4,500-foot level the parks become more numerous and the subalpine forest begins to show the effect of its struggle with the elements. Dense groves still cling to the sheltered mountainsides, but the gnarled and weather-beaten trunks of the exposed trees speak mutely of their desperate struggle against the wind and snow. At 7,000 feet we still find small groves of wind-stunted mountain hemlock, alpine fir, and white-bark pine, but beyond only a few mountain hemlocks survive, their sturdy branches pressed flat by the weight of wind and snow. At 7,600 feet even these vanish, and we enter the realm of perpetual ice.

One does not need to be a lumberman to appreciate the value of these great forests, nor a poet to see their beauty, nor a scientist to read the drama of their battle for existence. With profound satisfaction we realize that Mount Rainier National Park will stand a barrier for all time against the ruthless axe of the lumberman.

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PARADISE INN, RAINIER NATIONAL PARK

MOUNT RAINIER NATIONAL PARK

MOUNT RAINIER NATIONAL PARK

Hotels and Camps

FOUR

THE Mount Rainier National Park Company is under contract with the Government to establish and maintain hotels, inns, camps, automobile and auto-stage transportation, as well as garages, riding and pack horses and other services organized to meet the needs of visitors. Living accommodation consists of a comfortable hotel at Longmire Springs, at the base of the mountain, an attractive hotel in Paradise Valley, high up on the side of the mountain, and, lastly, a series of tent camps situated in less accessible spots of special scenic attraction.

The National Park Inn at Longmire Springs is a frame structure with a broad veranda for sunny hours, and great stone fireplaces for cheer and warmth when the sun sinks and the cold mountain air creeps down from the snow-fields. Besides the commodious main building, there are comfortably floored and furnished tents for guests. An attractive club house or assembly hall of pine logs offers further comfort and enjoyment of visitors. From this point many trails radiate into the beautiful forest and mountain regions of the neighborhood, and pack horses and complete camping outfits can be secured by those who wish to penetrate the wild beyond.

Paradise Inn is a unique building in an alpine wonderland. The construction of this attractive and fully-equipped hotel, among the snow-fields, was a task that offered many and serious difficulties. As Paradise Valley is 5,557 feet above the sea, it is free of snow for but a comparatively short period in the year, and every nail and board in the structure had to be relayed upward, little by little, as the snows slowly melted under the spring sun. When everything to be used in the construction of the Inn had been assembled at the edge of the snow-filled valley, a large corps of expert workmen was brought to the spot, and about forty days after the ground was broken the project was successfully completed. Particular praise is due the builders for designing a building that harmonizes with its surroundings. A green roof and a liberal use of the untreated logs of the "silver forest" has resulted in a very artistic as well as commodious building.

The interior, too, is suggestive of the wilderness life, for broad open fireplaces radiate a warmth that is always grateful in this high altitude, and a massive framework of silver logs strengthens the roof and walls against the tremendous weight of the winter snows.

Paradise Inn opens the first of July. Around it are grouped 100 bungalow tents, comfortably furnished, and lighted and heated by electricity.

In addition to the Inn, a new Paradise Camp has been erected about 300 yards west of the Inn. Plain white canvas wall tents furnish comfortable sleeping quarters. Meals are served in a pavilion conveniently located, and a large open-air furnace is provided for those that choose to do their own cooking. This plan allows people of very modest means to enjoy in comfort the pleasures of this beautiful vacation ground.

The present park management reflects credit on both the Government and the Mount Rainier National Park Company. Mr. D. L. Reaburn, of the United States Geological Survey, is the Governmental Supervisor, and the efficiency with which the Park is managed and improved is directly traceable to his experience and ability. The Mount Rainier National Park Company is composed of representative public-spirited citizens of Tacoma and Seattle. Every department is working harmoniously on the huge task of opening up this mountain wonderland to the American people.

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PARADISE VALLEY ROAD, RAINIER NATIONAL PARK

MOUNT RAINIER NATIONAL PARK

THE beautiful photograph that accompanies this text was taken in the vicinity of Ricksecker Point, on the magnificent automobile highway that runs directly from the city of Tacoma on Puget Sound to the snow-fields of Mount Rainier. This view, showing the southern face of Mount Rainier, a part of the rugged "park country" lying at its base, and a glimpse of the mountain highway, is one of the most spectacular panoramas to be seen in North America.

No photograph can give more than a suggestion of the vast height and grandeur of the great peak, and the beauty and interest of the timber-line country that lies below the snow-fields. Below Gibraltar Rock, which can be recognized on the right sky-line of the big mountain, is situated a shelter cabin for the convenience and safety of those that attempt the climb to the summit. Beginning at the snow-field below this cabin, and counting to the left, we can see portions of seven different glaciers: the Paradise, Nisqually, Wilson, Van Trump, Kautz, Success and Pyramid Glaciers.

Below these ice-rivers lie the "parks," those lake-gemmed, flower-spangled glades that have made this region world-famous. Here are found the mountain flower gardens that John Muir wrote of. Trails lead upward to this wonderland from the lower valleys, and sure-footed ponies are provided for those that are not accustomed to such steep ascents. A glimpse of the grassy hillsides of Van Trump Park can be seen beyond Cushman Crest, the dark rock peak in the middle distance. To the left of Van Trump Park, and just outside of the picture, lies Indian Henry's Hunting Ground. Mishell Henry, or Indian Henry as he was called later, was one of the first Indians of the Northwest to hunt on the southern slope of the great mountain. He belonged to the Klickitat tribe and shared with his fellow redmen the belief that the snow slopes were haunted by supernatural beings. He was the first to follow the present route to the snow-line, and the beautiful glades where he once hunted the deer and the mountain goat still bear his name.

Just below the snow-fields that show at the right of the picture lies Paradise Valley. It is here that the Mount Rainier National Park Company has constructed Paradise Inn. From this beautiful site a trail leads southward to the falls and hot springs of the Ohanapecosh River. If the visitor has enough time at his disposal, he can follow this trail to Ohanapecosh Park, the Cowlitz Chimneys, White River, Inter Glacier, across Burroughs Mountain, past the Winthrop Glacier to beautiful Mystic Lake, down the Carbon Glacier, past Crater Lake to Sunset Park, and thence to the Park entrance. Such a trip requires a pack train journey of at least ten days, but with the experienced packers and guides that are furnished by the Park Company, it is one of the most satisfying mountain journeys that our country offers.

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WATERFALLS, VAN TRUMP PARK, RAINIER NATIONAL PARK

SIX

THE Cascade Range, as its name implies, is the land of the waterfall. The bold slope of the range and its rugged character, the moist lowlands and the tremendous snows that cover the summits, all combine in the production of countless cascades and falls. Waterfalls exert a psychological influence on man that is difficult to explain. We all know the feeling of delight that is produced by the sight of a clear stream leaping down a rugged mountainside, and all of us that have seen Niagara have been stirred by the awesome grandeur of the spectacle, but these moods are accompanied by a mental stimulation that cannot be accounted for by the mere sight of falling water. I remember being told by two Indians of the far Northwest, who belonged to different tribes and lived a thousand miles apart, that if a man lived alone for a long time close to falling water he would become mentally unbalanced. At the time I was amused at the idea, but later experiences in the Alaskan wilderness taught me that there was much truth in what they had said. The mind becomes so stimulated that, in time, the sound of human voices and distant music is constantly heard in the roar of the water, until, haunted to desperation by these imaginings, one moves his camp to a silent retreat.

The streams in Mount Rainier National Park lack the grimness and awe-inspiring quality of the Alaskan torrents, but they are far more graceful. Those that are fed by snow-fields, or springs, are clearer than crystal, if that be possible. In the deep pools the water takes on the most alluring shades of green and blue, and it is in such quiet retreats among the granite boulders that the mountain trout loves to lie. I know of no experience more delightful than following one of these mountain waterways from the point where it begins as a gushing spring below some snow-field down to the point where it has grown into a full-banked mountain stream. No mountain landscape is complete without a glimpse of some brook dashing downward, while the deep voices of waterfalls everywhere accentuate the sense of wildness in these haunts primeval and remote.

The glacier rivers are entirely different in character from other streams. Their water is heavy with the weight of crushed rock, or silt, that is ground from the cliffs by the terrific pressure of the moving ice. The white color of the water accounts for the Swiss calling it "glacier milk," and, although it lacks the beauty of clear water, it has this compensation that, by studying it, we can clearly follow nature's method of grinding down the mountains, and building up the lowlands. Gravity furnishes the power by which the ice grinds the mountains away, and heat from the sun supplies the force that carries the ground rock to the lowlands. Even at long distances from the mountains the rivers that flow from glaciers rise and fall in rhythm to the warm and cold hours on the distant glaciers from which they come.

The brooks and rivers of Mount Rainier National Park form one of its chief attractions, and there is scarcely one watercourse within the Park boundary that does not, at some point, break into falls or cascades that delight the eye. Of all these, Narada and Sluiskin are the most accessible, as they are close to Paradise Inn, but Spray Falls, on the northern slope of the mountain, and the cascades of the beautiful Ohanapecosh River, will richly repay those that are able to go farther afield.

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MOUNT RAINIER FROM PUGET SOUND
Photographed from Seattle, sixty miles distant by air line

MOUNT RAINIER NATIONAL PARK

By BELMORE BROWNE
Author of "Conquest of Mount McKinley"

MENTOR GRAVURES

WATER, WILD FLOWERS, WOODS, AND THE ETERNAL SNOW · THE FOREST ROAD
PARADISE INN · MOUNT RAINIER FROM TACOMA · PARADISE VALLEY ROAD
WATERFALLS, VAN TRUMP PARK

Through the courtesy of Mr. Asahel Curtis we have been able to publish the beautiful photographs that appear with this article. An enthusiastic and expert mountain climber, Mr. Curtis has devoted the best years of his life to photographing the wildest and most rugged portions of the western mountain ranges. In magnitude of labor and techn.cal perfection of work he has no superior among the mountain photographers of this country.

WE cannot speak of Mount Rainier National Park without dwelling on the great mountain that has given the Park its name, for, with the exception of some of the giant mountains of Alaska, there is no peak in North America that can compare with it in rugged grandeur, or in the size and beauty of its glaciers. John Muir spoke of it as the noblest of all "the fire-mountains which, like beacons, once blazed along the Pacific Coast." John H. Williams, in memory of the reverential awe with which the Indians regarded the ice-clad monarch, named it "The Mountain that was God." The Indians called it Ta-co-ma, and although this name is still in common use, the name Rainier, conferred on the mountain by George Vancouver, has been approved by the United States Board of Geographic Names.

The total area of its glaciers amounts to nearly fifty square miles, and twenty-eight separate ice-rivers cling to its rugged sides. In height it is

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second in the United States only to Mount Whitney, and rises 14,408 feet above the sea. Its base covers one hundred square miles, or one-third of the three hundred square miles of territory that compose Mount Rainier National Park.

GATEWAY TO MOUNT RAINIER NATIONAL PARK

Mount Rainier is in the western part of the State of Washington, about forty miles inland from the city of Tacoma (fifty miles by road), and ninety miles from Seattle via Tacoma. Most of the world's great mountains are difficult to reach. A remarkable feature of Mount Rainier is its accessibility; one can breakfast in the heart of a modern city and lunch among the glaciers. The ride over the splendid road that leads from the sea to the everlasting snow in the space of a few hours constitutes one of the most remarkable journeys in the world. It has been my good fortune to live for more than twenty-five years at the base of this noble peak, and although every detail of the journey from the sea to the snow is indelibly printed on my mind, I have never become accustomed to the wonder of it.

Approaching the Mountain

As no visit to the mountain is complete without seeing "the mountain road," let us enter an automobile at Seattle or Tacoma, on the shores of Puget Sound, and begin the enchanting ride that will carry us above the clouds.

NEAR LONGMIRE SPRINGS
Beneath the white shoulders of Rainier-Tacoma

If we prefer, we can reach the mountain by a picturesque ride on the Tacoma Eastern, a branch line of the Chicago, Milwaukee and St. Paul Railway, but as expense does not enter into an imaginary journey, let us take the vehicle that offers the greater freedom. Leaving the city of Tacoma, the road follows the principal business thoroughfare to the

ON A PARK TRAIL
A popular way of spending sunny days

"prairie," a beautiful lake-dotted plateau, some thirty miles broad, that follows the base of the timber-clad foothills of the Cascade Range. Suddenly the road leaves the lowlands and begins to rise through a wonderful Washington forest. The car moves with the speed of the wind over the magnificent concrete highway that winds like a giant ribbon between solid walls of towering Douglas firs. On the hottest day of summer these deep forests are filled with a grateful coolness, and the air, as it rushes past, is redolent with the fragrance of growing things. Occasionally we pass through clearings where the axe of the lumberman or settler has let in the sunshine; we may have almost forgotten the object of our trip in the interest of our surroundings, when the road sweeps to the top of a bold bluff and an inspiring view of the great peak bursts into view, with the level fields of Ohop valley lying far below.

From this point onward the highway yields innumerable delights. Now it plunges through a dense growth of forest, now it sweeps across a glassy stream, where in the autumn one can see salmon struggling toward their spawning beds against the swift water. Now it changes to a canyon road and creeps precariously across grim cliffs that echo to the fall of glacier water far below. This chance meeting with the ice-fed Nisqually is destined to grow into intimate friendship, for again and again the foaming torrent comes into view until we have traced it to the river of ice that gives it birth.

Our second glimpse of the Nisqually finds it flowing peacefully through the outskirts of a little frontier settlement. It is lost again as the road enters a forest so deep that scarcely a ray of sunlight reaches the ground. This is real "timber,"

THE AUTHOR'S CABIN
In a valley between the Mowich and Carbon Glaciers

as a lumberman would say, and our eyes roam with delight through the green vistas. As the road climbs almost imperceptibly into higher altitudes the forest changes, and we catch glimpses of blue crests looming above the tree-tops. The face of the driver brightens; he says, "We're gettin' up into the hills"! What magic there is in those simple words—"the hills"! From the Himalayas to the Cascades, we feel the same thrill when they are spoken. Perhaps it is the altitude, or the fragrance of vast forests, or the sound of rushing water, or something deeper that we cannot understand,—but when the lowlands fall away and the "smell of the snows" comes down to us from the high peaks, troubles are forgotten and a feeling of contentment creeps over us.

THE ROAD WINDS NEAR PARADISE RIVER
Inside the Park

Entering the Park

With the mountains in sight, the wheels seem to fly. Leaping brooks, mountain farms, and glimpses of the Nisqually flash past until our conveyance glides beneath an archway of tree-trunks, and comes to rest before a well-built log cabin. This is the Park Lodge, where visitors register and become initiated into the regulations of Uncle Sam's big playground. The first thing we learn is that the Park is *ours*. It belongs to the American people. The next thing we are taught is how to help take care of it. This consists in doing absolutely nothing that will injure anything in the Park, or make it less attractive for those that are to follow.

NATIONAL PARK INN
An agreeable resting-place and a convenient base for excursions

Having completed the brief ceremonies at the Lodge, the car speeds onward. The road at first winds through a magnificent stretch of forest. An occasional cliff shows above the trees, and although we begin to sense the proximity of Rainier,

we are taken completely by surprise when we cross an impetuous river and behold a vast dome of glittering snow towering into the blue. There is scarcely time to gasp before the forest closes over us, but the memory of that first close glimpse of the alpine giant will never fade.

Here we appreciate for the first time the true value of our national parks, for the timber is infinitely finer than anything we have seen outside the Park. With a feeling of deepest thankfulness we realize that the Government has, in the nick of time, saved these splendid works of nature from despoliation. Without governmental control these mighty forests would become wastes of charred wood, the roads would be muddy ruts, and the camping spots would be littered with ashes and discarded refuse.

PIONEERS OF THE PEAKS
From a painting by Belmore Browne

The Nisqually and Longmire Springs

A short ride from the entrance brings us to the National Park Inn and Longmire Springs. It was in this green valley lying in the shadow of the ice-fields that the Longmire family built its pioneer home. Within comparatively recent years the last apology for a road ceased at "the Longmire clearing," and beyond were only rough trails, where even the sure-footed cayuses frequently came to grief. Today, six-cylinder cars purr over a perfect highway that bends and twists upward so gently that we who traveled the old trail are lost in wonder at the transformation. From Longmire Springs onward the highway

IN FRIENDLY COMMUNION WITH THE MOUNTAIN
Camp Indian Henry

becomes a real mountain road. Every foot now reveals some new glory that beggars description. Great rock peaks come into view and retreat to give place to others even more inspiring; falls of crystal water leap from moss-covered cliffs; a bracing breath of cold wind from the snow-fields sweeps downward, bringing the hoarse roar of glacier water. After five and a half miles of steady climbing the road crosses a bridge; our old friend the Nisqually swirls beneath it, and the valley above is blocked by a wall of ice. This is the birth-place of the Nisqually River—the spot where the frost of the upper world surrenders to the warmth of the lowlands.

A WILD FLOWER GARDEN RIMMED BY THE SNOW-FIELDS

FRAGRANT SLOPES AT THE BASE OF THE MOUNTAIN

We are now to traverse one of the most remarkable automobile roads in the world. All travel is regulated by telephone between ranger stations, so that a block system protects the public along the steep cliffs. At last the order of scenery is reversed, for instead of looking up at everything we begin to look down. The Nisqually appears no longer as a roaring torrent, but as a silver thread winding away into a blue wash of forest that ends in the lowland mist. Every foot of rise now brings some new peak into view; a great mountain range materializes in an instant as some obstructing dome falls away, and we are surrounded by a new world of rock and ice. There is a point on this road that overlooks the entire sweep of the Nisqually, from the green borders of

A CAMP IN A PARK-LIKE MEADOW

MIRROR LAKE
This is called "the Duplex Picture"

Puget Sound to the summit snows that form Nisqually Glacier. Beyond this point we skirt a chasm that is overhung by the frowning peaks of the Tatoosh Range and enter "the silver forest." This is a waste of "ghost trees," whose dead trunks have been weathered into a beautiful gray color by the winter winds.

Narada Falls and Paradise Valley

Suddenly a cluster of automobiles and a ranger's cabin tell us that we have come to the second block and must await our turn. The wait is not a tedious one, however. The air is pulsating to the thunder of falling water and, following a steep path down the mountainside, we come to a jumping-off place on the edge of a dim cavern; from the opposite wall a majestic waterfall leaps from the sky into the deeps. Narada Falls, as it is called, is formed by a 150-foot leap of the Paradise River where it begins its journey to the sea. No more lovely fall than this could be imagined. While it is not of great size, it is an unforgettable feature in a region where every view is something to remember all a lifetime.

Above Narada Falls the road makes a number of dramatic switchbacks across the face of a great rock slide. It took courage to choose this route, and the engineers spent many a bad half-hour before their labors

SPRAY FALLS
A place of pilgrimage in Spray Park

were crowned with success. From the dizzy side of the mountain we see the falls far below us, and follow the rock-torn current into the shadow of the Tatoosh Range.

But, despite the beauty and grandeur of what has passed, nothing can approach the scenery that begins to unfold as the road follows the Paradise River into the land of perpetual snow. Again and again it crosses the torrent, and with every turn a new flower-bedecked glade opens to let us pass. As the powerful engine pants steadily upward, the "parks," as the opens are called in the West, become more numerous. Then the trees part and a vast mountain amphitheatre comes into view. Slopes of tender green splashed with purple heather, beds of moss spangled with avalanche lilies, rocky heights crowned with weather-beaten evergreens, new-born streams flowing downward from gleaming snow-fields, and high above, clear-cut against the deep blue sky, the towering bulk of "The Mountain that was God." Whoever named Paradise Valley was guilty of no exaggeration. In all the mountains of the world there are few that equal it.

The road sweeps around the central bowl of the valley in a gradual ascent until it reaches a terrace lying just below the summit of a great ridge that overlooks the Nisqually Glacier and leads to the snow-fields above. At this wonderful vantage-point, with the great mountain rising on one side, and the whole sweep of the Tatoosh Range on the other, our car comes to rest before the hospitable veranda of Paradise Inn.

When we are at last settled in our comfortable quarters we are

bewildered by the number and variety of mountain excursions that are offered to us. There are peaks without number, and crags, precipices and waterfalls, and lakes, clear and still, that reflect distant snow peak and nearby wild flower. There are long tramps to deer-haunted parks hidden away among the mountains, and exciting rides along steep trails.

On the Mountain Heights

Of course the greatest adventure of all is the climb to the summit of Rainier. With the exception of some of the Alaskan peaks, this mountain offers the highest snow climb in North America, and for experienced climbers whose limbs and lungs are strong, it is a wonderful and not too arduous expedition. The great upland snow-fields are easy to reach, and prospects of the lowlands can be enjoyed, together with the novel experience of summer coasting. Then there is Pinnacle Peak, the highest point of the jaggèd Tatoosh Range. Its ascent is not difficult, and it offers countless splendid views of the surrounding mountains and mirroring lakes that lie at their base.

The Nisqually Glacier, too, is well worth a visit. The dangers of skirting the crevasses are minimized by the help of the competent guides that can be secured at Paradise Inn. Beyond the glacier are the flowery slopes of Van Trump Park. In addition to the scenic beauty of this park there is the possibility of seeing mountain game, for several bands of Rocky Mountain goats make their home among the crags that separate the park from the snow-fields. Late afternoon is the best time to watch for these interesting animals, as they come down to their feeding grounds on

COMET FALLS, VAN TRUMP PARK

WASHINGTON TORRENTS, PARADISE RIVER

the steep grassy hillside after the heat of the day. If one has patience, bear and deer may be seen also, but this mountain game is shy, and one must not expect to succeed at the first attempt.

TERMINUS OF NISQUALLY GLACIER
Where the Nisqually River is born

From every valley a new summit beckons, and from every height a new sweep of alpine wonderland stretches away on either hand. Visitors soon realize what the writer discovered, that if one spent a month out of every summer for ten years in exploring this region, there would still be many mountain secrets to lure one back again.

During my younger years I spent every spare moment in the green "park country" that sweeps the northern base of the mountain. Those were wonderful days when every valley hid a fabulous "lost mine," when blankets were an unnecessary encumbrance, and trout and venison everyday fare. We built a cabin on Crater Lake, between the Mowich and Carbon Glaciers. I can still feel the clutch of the icy waters as we took our plunge after a scramble among the snow peaks. In time every man- and game-trail was an open book to me, and I thought I had an intimate knowledge of the Park. During the past summer, however, I followed for the first time the new trail that circles the base of the mountain, and it was then I learned that what I had seen of the Park was but an insignificant section on the map: streams, valleys, peaks and ranges that I had never heard of, rushed, or spread out, or loomed derisively along my trail, and when our last campfire was extinguished and we

CREVASSES, STEVENS GLACIER

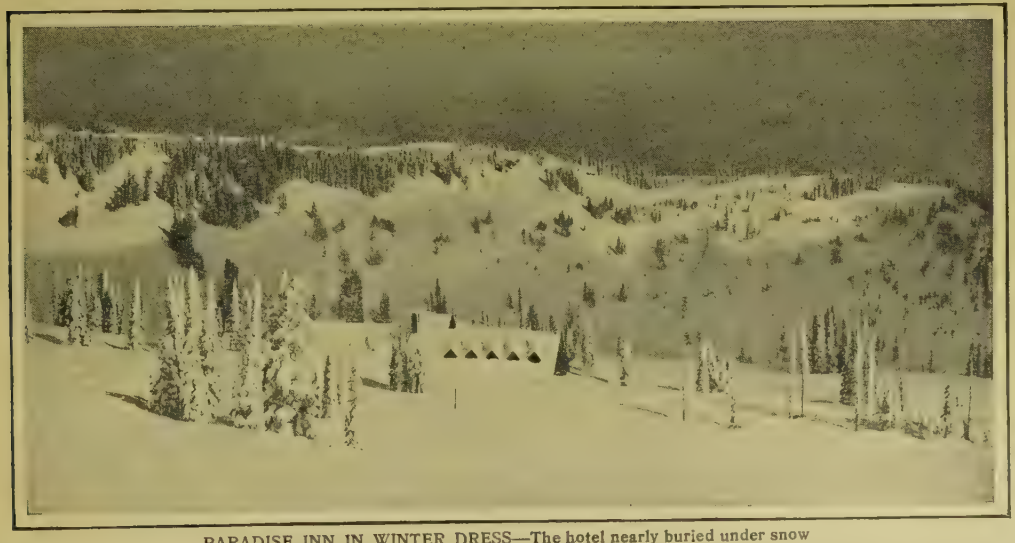
wound downward from the lowest snow-field I was convinced, as I am now that, foot for foot, there is no mountain region of like area on the globe that has a greater variety of alpine beauty than Mount Rainier National Park.

THE MAN AFTER WHOM THE MOUNTAIN WAS NAMED

Peter Rainier, "Admiral of the Blue," from an engraving made for Capt. Brenton's Naval History of England, 1838

First Climbers of the Mountain

In 1833, Dr. Fraser Tolmie, a young surgeon of the Hudson Bay Company, made a trip to the lower slopes of Rainier for the purpose of gathering herbs, but did not ascend beyond the flowered valleys. The first authentic record that glaciers existed within the territory of the United States is credited to Lieutenant Kautz, who, in 1857, was stationed at a nearby fort, and climbed to the region now called Van Trump Park. P. B. Van Trump and General Hazard Stevens, ascending by the south side, reached the snowhill on the summit of the mountain in August, 1870, and spent the night in the middle crater. Two months later, Government surveyors achieved Columbia Crest (14,408 feet). In clear weather a prospect that includes Puget Sound, the Olympic Mountains, the Pacific Ocean, and the Cascade Mountains, extending northward into British Columbia and southward into Oregon, compensates the rugged ascent from the east over White Glacier, or from the south by way of Paradise Valley to the crags above Nisqually Glacier, up the shelving ledges of treacherous Gibraltar and over the snow to Crater Peak and the Crest. But only those that have exercised lung and limb in inferior ordeals are equal to the ten-hour trek over moraine, sharp-angled, rock, cleft ice and glaring snow to the form at the top, which is three miles broad, and is raised two and three-quarter miles toward the vault of heaven. —*Editorial Note.*



PARADISE INN IN WINTER DRESS—The hotel nearly buried under snow

SUPPLEMENTARY READING

MOUNT RAINIER *By E. S. Meany*

THE MOUNTAIN THAT WAS GOD *By John H. Williams*

NATIONAL PARKS PORTFOLIO

MOUNT RAINIER AND ITS GLACIERS

Issued by the Department of the Interior, Washington

*** Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

There is probably no one living today who is more familiar with Mount Rainier National Park than Belmore Browne. He has spent many seasons there, camping in his little log cabin by Crater Lake—a picture of which we reproduce in this number. In one of the monographs, Mr. Browne has a word to say on the subject of the name of Mount Rainier. The United States Board of Geographic Names, determined several years ago that "Rainier" should be the map name of the mountain, but many of the travelers, guides, and others that love that region, prefer the original Indian name "Tacoma." Belmore Browne has made it a subject of special pleading, whenever opportunity has permitted. Ruth Kedzie Wood, a travel-writer well known to the readers of The Mentor, also pleads for the picturesque Indian name. "Tacoma" (Nourishing Breast), is the generic term for "Mountain," and the Indians, who used the term as we would use the word "Mount" designated Rainier, the monarch of all the peaks they knew, simply as "Takhoma" (The Mountain). When the name "Tacoma" was used among the Indians of the great Northwest, no one asked *what* mountain was meant. "Tacoma" meant to them *THE Mountain*, the complete embodiment of mountain attributes, "the be-all and end-all of mountainism—the Indians' 'Mighty Snow' standing tall above the sea in placid grandeur apart from others of its kind, mothering within its spacious confines greater bulk and spread of ice than many of the Alps of Switzerland together."

★ ★ ★

And yet our maps tell us that we must call this snowy peak by the name that Vancouver gave it long ago. So it goes by the name of a man who not only never saw the mountain, but who was actively antagonistic to our colonies throughout the Revolutionary War. I am glad that Vancouver lived in a time when transportation was a slow and time-consuming matter, for I dread to think what he would have done today, in an airship, swooping over the continent before anyone else arrived, and, in his large, liberal way, naming the rivers, mountains, lakes and other scenic wonder-spots after particular friends of his, or as complimentary tributes to his superiors. The name he gave to the Puget Sound country—"New Georgia"—was changed, after the Americans took possession, to that of "Washington." Why, then, could we not go back to the beautiful Indian name of "Tacoma" for The Mountain of the far Northwest?

★ ★ ★

Here is a nice note of appreciation just received from a member of a reading club in Ontario, Canada.

DEAR MENTOR—Thank you so much for the programs on Great English Novelists. They were all that could be desired. Our members were greatly pleased. Your method of Service is a delightful time-saving convenience for clubs that are busy "doing their bit" for the war. Thank you again. Sincerely, MISS M——— B———

If you want similar help, write to us.

★ ★ ★

A publication must take a strong hold on people when they will voluntarily commit themselves to it for life. Most people consider their magazine reading carefully, and reconsider their magazine list each year. It means something, then, when readers of The Mentor write in that they have made up their minds to be "lifers." It means more to me than I can put into words. Two letters, received one day last week, contain the same declaration. A young girl reader from Ohio writes, "I subscribed for The Mentor last year, and I shall keep right on taking it for the rest of my life. It far exceeds my expectations." A Connecticut boy tells me, "It is a year ago that The Mentor came into my home, and it is invited to stay as long as I live." Both of these letters come from young people, with a prospect of long life before them. What, then, will the coming years mean? When they have taken The Mentor year in and year out, until a half century has passed, and their eyes are toward the setting sun, how will The Mentor appeal to them? What will it mean to them in old age? The answer to that question, by an odd coincidence, came to me in the same day's mail. I opened a letter from a professor in a Western college, and read: "You are a most welcome and most helpful visitor. The Mentor is appreciated by every member of the family, *especially grandfather who says that, at eighty-three, he isn't too old to* 'Learn One Thing Every Day' from The Mentor."

W. D. Moffat

BY PAUL L. ANDERSON

PHOTOGRAPH FROM A DAGUERREOTYPE

ONE

LOUIS JACQUES MANDE DAGUERRE (born 1789, died 1851), was a great French scene-painter who experimented for many years trying to find some way of rendering permanent the image projected by a lens. J. Nicéphore Niépce was engaged in the same research, and from 1829 until the death of Niépce in 1833 the two worked together, but it was not until some years after the latter date that Daguerre discovered the process that bears his name. This process may be briefly described as follows: a highly polished and perfectly clean silver plate is rendered sensitive to light by the formation of a deposit of silver iodide on the surface, this being accomplished by exposing the plate—of course in the dark—for some minutes to the vapor of iodine. When the plate has assumed a uniform golden-brown color it is placed in the camera and the exposure is made, the light projected by the lens causing a chemical change to take place in the silver iodide. The image thus obtained is very weak, and in order to strengthen it the plate is exposed for some minutes to the vapor of mercury. It is subsequently fixed, or rendered permanent, by bathing with a solution of sodium thiosulphate (ordinarily known to photographers as "hypo"). This dissolves the silver compounds that were not affected by light. In some cases the picture is still further strengthened by treating it with chloride of gold. This not only increases the vigor of the image but at the same time improves its stability, so that it is less likely to fade as the result of atmospheric action or exposure to light. The effect of the chloride of gold is literally to gold-plate the image. As the surface of the completed daguerreotype is very sensitive to any mechanical action, it must be protected by glass. A mere touch of the finger leaves an irremediable scratch.

The daguerreotype was at one time very popular for portraiture, but the process has certain drawbacks that have caused it to be superseded by improved methods. Among these drawbacks are the following: The exposures required are rather long; it is impossible to make duplicates—a separate exposure must be made for each picture; the picture must be held at a certain angle to make it visible, and the process is rather expensive and laborious to work. Nevertheless, exquisite effects may be obtained in daguerreotype; the writer has seen pictures of this kind which for sheer beauty yield to none of the modern printing mediums.

The decadence of the daguerreotype is to be regretted for at least one reason,—the man who elected to work in that medium was necessarily at least a craftsman, whereas at the present time many photographers are neither artists nor craftsmen, but merely mechanics of only fair skill. Photography has been brought to such a state of perfection that good technical results may be obtained by persons that work by rote and know absolutely nothing of the principles underlying the craft. This lack of training and enthusiasm for the work must evidently be reflected in the results obtained.

There are few forms of portraiture art that equal in beauty choice early examples of daguerreotype photography. They have the exquisite delicacy, softness and individual charm of the best miniature portraits. Good old daguerreotypes are treasured possessions in the homes of many families—and rightly so, for they combine a fine quality of art with a gentle personal appeal.

WRITTEN FOR THE MENTOR BY PAUL L. ANDERSON
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FROM A PRINT BY ALVIN LANGDON COBURN

SELF-PORTRAIT PHOTOGRAPH BY D. O. HILL

DAVID OCTAVIUS HILL (born 1802, died 1870), was a Scotch painter who conceived the idea of producing a great historical picture representing the Disruption of the Church of Scotland. This work involved painting some four or five hundred portraits, and Hill, despairing of obtaining satisfactory sittings from so many persons, turned to the newly discovered art of photography to furnish the portraits he needed, with the idea of using the photographs as a guide in painting. Hill used the calotype process, invented by Fox Talbot, which rendered a piece of paper sensitive to light by coating it with iodide of silver. When it was exposed in the camera and developed, a negative resulted, and positive prints were made from this negative in the same medium.

Hill became so much interested in photography that he worked with it for several years, to the neglect of his painting. During those years he produced photographic portraits which have certainly never been surpassed, and which some people think have never been equalled. The exposures necessary were very long—four or five minutes in bright sunlight. This fact lends a great deal of beauty to the results, for there is no doubt that full sunlight gives effects that cannot be obtained in any other way, and these may be of surpassing beauty, provided the photographer is skilful enough to manage his apparatus and pose the sitter properly. It is regrettable that so many photographers of the present day shun out-door portraiture, for there is unquestionably a great opportunity in that class of work. The claim of some photographers that out-door light is not satisfactory for portraiture is refuted by Hill's results.

Hill was not a great painter. His works in that medium are well-nigh forgotten, but he was unquestionably a man of great sensitiveness, who possessed the quality of psychic insight so necessary to a portrait worker. It is the estimate of an authority that, though he could never be compared with the great masters of portraiture, Rembrandt and Velasquez, nevertheless his works are entitled to a place in the second rank.

Hill was especially fortunate in his sitters, for the men and women that he photographed were persons whom it would be difficult to render commonplace in appearance, among them being Christopher North (Professor John Wilson), J. G. Lockhart, Lady Ruthven, Robert Haldane, William Henning, Mrs. Anna Brownell Jameson, and others of equal note in Great Britain.

The paper negatives made by Hill are carefully preserved. The writer is fortunate in the possession of prints from two of these negatives. The reproduction shown herewith, a gum-platinum plate made and given to him by Alvin Langdon Coburn, is from one of them. Much of the beauty of this example of Hill's work is due to modern printing methods, but the quality in this negative, brought out in the print, proves undeniably that Hill merits recognition as a master of portraiture.

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BROOKS' COMET Astronomical Photograph

PHOTOGRAPHY has made possible many discoveries of tremendous importance in the realm of astronomy by revealing the existence of stars too faint—because of their small size or great distance—to be seen by the eye. This is one of the most conspicuous ways in which the sensitive plate has been an aid to the scientist. A device for carrying a photographic plate is attached to a telescope and the plate exposed to the image projected by the telescope for a prolonged period. This may, in fact, amount to several hours; exposures are sometimes partly completed one night and finished the next, a comparatively small area of the heavens being chosen for investigation at one time. On development of the plate the stars are counted and compared with existing charts of the area in question. Of course this method requires that the telescope move with the same angular velocity as that of the earth's rotation, so that the image of each star may remain in precisely the same position on the plate during the entire time of exposure. Otherwise the star would be represented as a trail of light, the slightest variation in the speed of rotation being sufficient to cause blurring of the image. It is apparent that the clockwork employed for driving the telescope must be a marvel of accuracy.

The power which this method possesses of revealing hitherto undiscovered stars depends on a curious fact. If an observer looks into the eye-piece of a telescope he can discern only those heavenly bodies that send to the earth a certain minimum of light; but when a photographic plate is exposed for long periods there is a cumulative effect of light on the sensitive emulsion. That is, the long-continued impact of the light rays causes, little by little, a gradual change in the constitution of the sensitive silver salt. The action thus piles up, so to speak, and records light that is far below the visible minimum.

The photographic plate has not only aided discoveries in the vast realms of interstellar space, but has also revealed to us things so exceedingly minute that no other method of observation could bring them within the range of our perceptions.

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BY PAUL L. ANDERSON

PORTRAIT—BY THE BROMOIL PROCESS

IN the bromoil process, the first step is to make a bromide enlargement. The negative from which a print is to be made is placed in an apparatus resembling the familiar stereopticon and an enlarged image is projected on a piece of bromide paper, or paper that has been coated with an emulsion similar to that used for plates.

After the paper has been exposed to the image it is developed, fixed and washed, the result being a large positive print of the original small negative. Often this print is allowed to remain as it is, and it is then known as a bromide enlargement, or, simply, an enlargement; sometimes the worker converts it into a bromoil.

The image in an enlargement consists of metallic silver in a film of gelatine, the gradations of the picture resulting from the varying thicknesses of the silver image. The first step toward changing this to a bromoil is to treat it with certain chemicals that bleach out the silver image and at the same time harden the gelatine in proportion to the amount of silver present. The bleached print is then soaked in warm water, and the high-lights of the picture, where the gelatine is least hardened, absorb the water freely, the half-tones less so, and the shadows least of all. An oily ink, then dabbed on the print with a brush, adheres freely in the shadows, less freely in the half-tones, and least of all in the lights, being repelled by the water in the film. The final result is a print in which the image is formed by varying thickness of ink, which, of course, may be of any color.

The advantages of bromoil over bromide are numerous. In the first place, a bromide print cannot be regarded as absolutely permanent, but a bromoil may be. Next, the color of a bromide print is limited to black and varying shades of brown, unless chemical toning is resorted to, which still further reduces the stability of the image. But a bromoil may be of almost any color, and, indeed, of different colors in different portions of the picture. The greatest advantage of the bromoil process, however, lies in the fact that as much or as little ink as may be desired can be put on any given area. By varying the consistency of the ink it can be made to adhere more or less freely. By modifying the brush action it can be placed on the print or omitted from it, and can even, at times, be removed after being deposited on the paper. It will be seen that the artist has complete control over the gradations, and to some extent, also, over the outlines of the picture. He can therefore make the process respond to his desire for artistic expression to an extent not possible with any other photographic printing medium, even the superficial texture of the image being largely under the worker's control.

A variant of bromoil is the oil process, though it would be more correct to put it the other way about, the latter process being the older of the two. A sheet of paper is coated with gelatine alone, this being rendered sensitive to light by means of certain chemicals and then printed under a negative. The effect is to render the gelatine hard in proportion to the amount of light-action, that is, hardest in the shadows, less so in the half-tones, and least of all in the lights. The print is then washed to remove the excess of sensitizer, and soaked in warm water; the subsequent operations are the same as in bromoil. Oil is superior to bromoil in being slightly easier to manipulate and in not requiring a dark-room, but it is inferior in that it demands either daylight or a powerful artificial light for printing. Furthermore, a negative the size of the finished print is necessary, whereas with bromoil, large prints can be made from small negatives.

Oil and bromoil have the drawback of not being very rapid to work, three or four 11x14 bromoils representing a good day's work for a careful manipulator, but they are by far the most satisfactory of all photographic printing mediums when the desire is for artistic expression.

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PHOTOGRAPH BY PAUL L. ANDERSON

THE LAKE, WINTER—NATURE PHOTOGRAPHY

THE accompanying photograph entitled "The Lake, Winter," illustrates admirably the use of the soft-focus lens. It is also of interest as showing the advantages sometimes to be gained from the intentional use of defects. The normal human eye is unsurpassed for the purpose for which it is designed; it is difficult to imagine an organ more perfect in this respect. The eye automatically, and almost instantaneously, adjusts itself for near or distant objects and for varying intensities of light, and has, moreover, a field of view of nearly 180 degrees—almost a complete half-circle. Nevertheless, it has two defects that tend to impair the accuracy of vision, namely, chromatic and spherical aberration. Chromatic aberration is the inability to focus simultaneously on two or more of the primary colors (it is this defect in the eye that causes red letters to seem to stand out from a blue or green background, a trick sometimes used in poster work). Spherical aberration is the inability to bring to a focus the rays of light that pass through the lens near the margins at the same time as those that pass through near the center. For these reasons—and, in lesser degree, some others—the eye cannot see sharp lines, and a lens that gives sharp definition to the edges of objects produces results that are esthetically unpleasing, because foreign to our experience. The soft-focus lens—of which there are numerous makes—is so designed that it possesses the errors that are normal to the eye, and therefore—if the characteristic softness of definition is not over-done by a too enthusiastic worker—gives results having an agreeable vagueness of outline. At one time the qualities of this type of lens were over-worked, the results being so excessively diffused that, as one writer said of a print, "it was impossible to tell whether it was a 'Portrait of a Lady' or a 'Water-Spout in the Gulf Stream.'" But for some years past the pendulum has been swinging the other way, and photographers in general (it must be understood that this refers only to artistic workers, not scientists) are now using the uncorrected lens so as to secure as nearly as possible the quality characteristic of the normal eye with, perhaps, a slight exaggeration for the sake of suggestion, and as a stimulus to the imagination.

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PHOTOGRAPH BY KARL STRUSS. BY COURTESY OF HARPER'S BAZAAR.

PHOTOGRAPH ILLUSTRATION FOR A STORY

A PHASE of photography that has a very broad scope is motion-picture work, the mechanics of which depend on this fact: If an object is looked at for a time and is suddenly removed from before the eye, the eye continues to see it for an appreciable time after its removal. This phenomenon is called "persistence of vision." A motion-picture camera is so arranged that a long strip of film can be drawn past the lens in a series of jerks, the shutter being opened to permit the image projected by the lens to fall on the film during the period that the latter is at rest; the film is drawn on to the next position while the shutter is closed. Naturally, an object moving before the lens will move slightly during the interval between exposures, so the film, when developed, shows a consecutive series of photographs of the object in slightly different positions. A positive print is made from this series of negatives on a similar strip of film. This is projected by means of an apparatus something like the familiar magic lantern or stereopticon, but so arranged that this film may be drawn along in jerks. Each photograph is shown for a fraction of a second, and is replaced, during the time that the shutter is closed, by one showing a slightly later phase of the motion. Because of the persistence of vision the eye blends these successive photographs into one apparently continuous motion. It will be seen that the term "moving pictures" is really a misnomer, since the pictures on the screen do not move, but remain perfectly stationary during the time that they are seen. By taking the pictures rapidly and projecting them slowly the apparent motion may be slowed down, so that a rifle bullet may take three or four minutes to travel across a screen space of as many feet. By taking them at wide intervals and projecting rapidly the motion may be speeded up, and a plant may seem to grow from a seedling to maturity in a few minutes. The ordinary taking and projecting speed is sixteen pictures per second, experiment having shown that this is the least number that the eye will blend satisfactorily. Since each picture is one inch wide by three-quarters of an inch high—in the film—it is evident that each second of time represents one foot of film. The writer has seen a rather elaborately staged photo-play that required an hour and forty minutes for projection; a simple calculation shows that this involved 6,000 feet of positive film—a little over a mile. The length of the negative film was undoubtedly more, on account of retakes, cuts, and so on. An expenditure of five or six hundred dollars for film, however, is but a small item in the cost of producing an elaborate photo-play, for the actors receive large salaries—though not so large as the press-agents would have us believe—and the cost of scenery is great. The production of photo-plays is nevertheless a profitable industry, as may be understood from the fact that the average daily attendance in this country is estimated at about twelve million. Assuming that each spectator pays only ten cents, this represents an intake of $1,200,000 daily and, as is well known, the prices of admission in many theatres range from 25 cents up to $1.00 and more. The artistic possibilities of the motion-picture play are obviously limited—it can never hope to rise to the emotional heights of the legitimate drama—but they are none the less considerable. It is to be regretted that the motion picture industry is at present so much in the hands of producers who pander to the coarser instincts of the public, through sensationalism and slap-stick farce; who are often indifferent to detail—the writer has seen a cow-puncher represented as wearing his six-shooter butt-foremost; who treat the author's work according to their own ideas. A well-known author remarked, on seeing the screen version of one of her books: "If I hadn't been fairly familiar with the story I wouldn't have known what it was all about." In general, firms seem to be more concerned with getting the public's money than with producing really artistic results. The writer once saw a photo-play version of a fairly well-known book, in which the producer had changed an elderly, gray-haired, quiet, experienced cattleman into a cheap imitation of a Bret Harte gambler of thirty years of age, the purpose of this metamorphosis being to transform a noble and self-sacrificing affection into a piece of gaudy sensationalism. Such tactics cannot fail to displease thinking people, but there are, fortunately, producers to whom these remarks do not apply—really conscientious men of high ideals, and signs are not wanting of an improvement in this regard. The motion picture, in worthy hands, can be made an educational medium of great value, not only in the dramatic art but in many other ways. Films frequently show scenes of historical interest, life in foreign lands, industries. Scientific subjects are treated, such as the peristaltic movements of the intestines and the action of the heart, photographed by means of the X-ray; also the life cycle of micro-organisms, the microscope being used in this case—and many other activities of life. Among the most interesting of these films are those produced by the Williamson brothers, showing sea life, though mechanical difficulties have so far prevented the photographing of the most interesting phase of marine life, that of the extreme depths.

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THE MENTOR · · AUGUST 1, 1918
DEPARTMENT OF FINE ARTS

THE STORY OF PHOTOGRAPHY

By PAUL L. ANDERSON
Artist Photographer, Author of "Pictorial Photography"

MENTOR GRAVURES

PHOTOGRAPH FROM A DAGUERREOTYPE

SELF-PORTRAIT PHOTOGRAPH *BY D. O. HILL*

BROOKS' COMET

A DAGUERREOTYPE

MENTOR GRAVURES

PORTRAIT BY BROMOIL PROCESS

THE LAKE, WINTER

ILLUSTRATION FOR A STORY

NUMEROUS investigators, Daguerre, Niépce, Fox Talbot, and others, have been credited with the discovery of photography, but the fact seems to be that these, and many more, merely contributed, each in his turn, some portion of the total that goes to make up the art as it now stands. Photography means, literally, "light-writing," the name being derived from two Greek words, *phos*, light, and *graphein*, to write. The practice of photography depends primarily on the fact that certain chemical compounds are changed into other compounds by the action of light. Another fact is closely allied with this, namely, that a suitably constructed lens of glass or other transparent material, or a fine needlehole used instead of a lens, will project the image of objects placed in front of it. A camera, then, consists of a light-tight box having at one end an arrangement for holding a lens or a card with a needle-hole in it, and at the other end a device for holding some light-sensitive chemical to receive the image projected by the lens. In modern practice this light-sensitive chemical is almost always bromide of silver or a mixture of the bromide with other silver compounds, these chemicals being held in an emulsion of gelatine. When the gelatine emulsion is coated in a thin film on a sheet of glass the result is known as a dry-plate, or, simply, a plate. When it is

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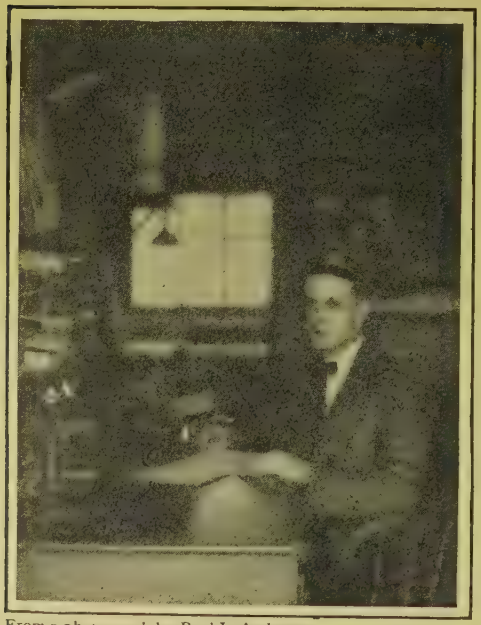
coated on a strip of celluloid wound on rollers so that successive portions may be exposed to light, it is called a roll film, and when it is coated on separate sheets of celluloid, arranged like a pad, to be exposed successively, it is called a film pack. A similar emulsion coated on paper gives bromide or gas-light paper, which, as will be seen later, is used for making prints. At one time wet collodion plates were generally used, a sheet of glass being coated with collodion and sensitized by bathing it with iodide of silver. The exposure was made before the plate dried; but these plates were inconvenient to handle and have been almost entirely superseded by the gelatine dry plate. The prepared plate, of whatever type it may be, is placed in the camera and exposed for a longer or shorter time, depending on circumstances, to the light projected by the lens, but no image is visible after exposure, (unless, indeed, the exposure has been tremendously excessive,) and the plate must be developed.

From a platinum print by Gertrude Käsebier
"BLESSED ART THOU AMONG WOMEN"
Portrait Photograph

There are about fifty different reducing agents on the market; most of them are derived from coal-tar, though some are made from nut-galls, lichens, and other substances. The developer consists of a solution in water of one or more of these reducing agents, with other chemicals to control the action, the exposed plate being bathed in this solution, either in the dark or in a light to which the plate is not sensitive. Wherever light has acted on the silver salts the developer causes metallic silver to be deposited in proportion to the amount of light-action, so that on holding the developed plate up to the light a dense deposit is seen in those parts representing the brightest portions of the subject, while the shadows of the original are represented by thin areas, and the half-tones by deposits of intermediate density. For this reason the developed plate is



From a photograph by Paul L. Anderson
A COUNTRY STATION MASTER
Portrait Photograph

called a negative. The plate is then bathed in a solution of sodium thiosulphate (generally called "hypo"), which dissolves the unaffected silver salt but does not affect the metallic silver—or at least does so only very slowly. Next, the plate is washed in water to remove all unnecessary chemicals, and is dried. The ordinary plate is sensitive only to ultra-violet (invisible) and violet light, so it cannot render truthfully any subject having color, but by the addition of certain aniline dyes to the emulsion it may be rendered sensitive to green in addition to violet and ultra-violet; it is then described as orthochromatic ("right-colored") or isochromatic ("equally-colored"). Still other dyes extend the sensitiveness to include not only ultra-violet but also the entire visible spectrum; such a plate is called panchromatic ("all-colored").

From a photograph by Paul L. Anderson
A PORTRAIT PHOTOGRAPH

Printing the Photograph

The finished negative, when dry, must of course be printed, and there are many printing mediums available. The carbon process gives an image in lamp-black or some earth pigment, bound up in a film of gelatine; the gum-pigment process gives an image similar to that of carbon, the binder in this case being gum arabic; the platinum process gives an image of black metallic platinum direct on the paper support. Other processes give different effects, one of the most valuable to the pictorial worker being gum-platinum, in which a completed platinum print is coated with a gum-pigment film and printed under the negative a second time, the final result being a gum-pigment image superposed on the platinum image. Of all printing mediums the one that has most intrinsic beauty, and is at the same time most capable of rendering satisfactorily the gradations of the negative, is probably platinum, so this is most used by pictorial workers. But, since it is expensive and requires daylight or strong artificial light for printing, nearly all commercial workers prefer the somewhat less beautiful and less permanent, but more convenient, gaslight paper, so-called because it can be manipulated entirely by gas-light, neither daylight nor a dark-room being required. This medium consists of paper that has been coated with an emulsion somewhat similar to that used for plates, but requiring much longer exposure. The negative is placed in an appliance that holds it in close

contact with the paper, then a sheet of paper is put in, and an exposure of a few seconds is given. Obviously, the paper receives most light under the thin parts of the negative and less under the denser portions, so that when the print is developed, fixed, washed and dried the resulting picture is light where the original subject was light, dark where that was dark, and show intermediate gradations where these existed in the original.

Photograph by Karl Struss

CAPRI, ITALY

For purposes of reproduction two processes depending on photography have almost entirely superseded the older methods of etching and wood engraving. These photo-mechanical processes, as they are called, are far more rapid and much cheaper, and are, in addition, more accurate. In photo-gravure the photographic image—copied by photographing the original—is transferred to a copper plate and the plate is automatically etched in an acid bath to varying depths, depending on the depth of shadow in the original. This plate is then inked all over, the ink being worked into the depressions in the copper, and the surface ink wiped off. A sheet of paper is brought into contact with the plate under heavy pressure, and, being forced into the hollows of the copper and taking up the ink from them, a print results. In the less beautiful but cheaper and more rapid half-tone process the copy is made through a cross-ruled glass screen, the image being thus broken up into a series of dots. The image so obtained is transferred to a zinc plate, which is etched in an acid bath or with an acid spray. The dots serve to protect the zinc from the action of the acid. *The finished plate shows an image consisting of dots with hollows between

From a bromoil transfer by Charles Kendall

THE SHADOW OF A SIGN

*See cut on page 9.

them, the dots being large and near together in the shadows, small and far apart in the lights. This plate is inked with a roller, and a sheet of paper, lightly pressed against it, takes up the ink to form a print. Thus it will be seen that photo-gravure is an intaglio (cut-in) process, and half-tone a surface-printing process.

Photographic Illustrations

Photography has not only superseded manual processes for reproduction, but has also largely replaced them for purposes of illustration. Practically all news illustrations are now made by photography, which is also extensively used for advertising work. To a less extent it is employed for fiction illustration, admirable work having been done in this field by Clarence H. White, Karl Struss, and Lejaren à Hiller. It does not, however, seem probable that photography will ever entirely replace draughtsmanship for the illustration of fiction, since the very strength of the camera,—that is, its surpassing power of rendering accurately the outlines and gradations of natural objects,—operates as a severe limitation in the case of original, imaginative work. It is difficult to conceive of "The Fall of the House of Usher" or "The Rime of the Ancient Mariner" being satisfactorily illustrated by photography, and if, for instance, "Le Morte d' Arthur" were made a photographic subject, the cost of models, costumes and scenery would probably be excessive.

From a platinum print by W. E. Macnaughton
SCENE ON THE CONNECTICUT RIVER

From a carbon print by H. Y. Sümmons
"THE STYGIAN SHORE"

Despite the limitations of the camera as regards imaginative work there is a small

but devoted band of photographers who use the camera as a means of artistic expression, and these men and women have produced some wonderfully fine results that fulfil the definition of art: "A means of arousing an emotion in the spectator." In the last analysis, however, it will be found that such results are due to one of two methods of approach: either the careful selection of an unusual natural effect, or the use of one of the so-called "control processes"—that is, printing mediums that allow the worker to modify at will either the outlines or the gradations of the negative, or both. In the former case, however, the photographer cannot be regarded as more than an exceptionally sensitive and perceptive craftsman, and in the latter instance the camera user, of course, ceases to be a photographer and becomes a creative artist, using photography merely as a basis on which to construct an imaginative result. The possibilities of this second method of work have not yet been fully explored; they appear to be limitless.

Photograph by Struss
AFTERNOON SUN
The Biltmore, New York

The Precision of Photography

The literalness of photography, which prevents its ever competing with etching or painting in imaginative art, makes it of inestimable value in certain realms, and scientists of all sorts, astronomers, physicists, physicians, pathologists, as well as architects, building contractors, business men, who wish a precise and accurate record of any object, recognize the value of the camera. Photographs are often admitted as legal evidence in court. It is impossible to overstate the value of the dry-

Photograph by Struss
A MISTY DAY
Chatham Square, New York

Photograph by Struss
SUNSHINE AND SHADOW
Park Row, New York

Photograph by Struss
SUNLIGHT ON SURF

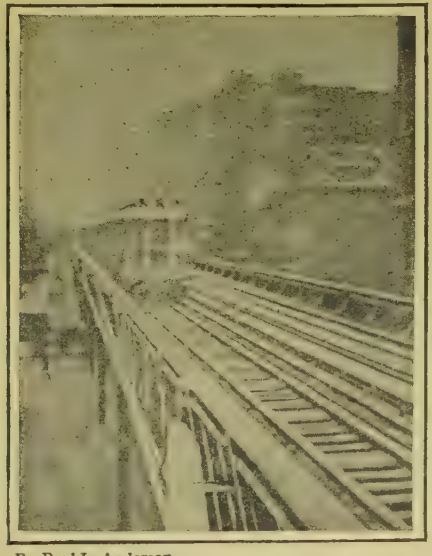
plate to the surgeon, since the X-ray, generated by passing an electric discharge through a glass tube from which most of the air has been exhausted, penetrates many objects that are opaque to ordinary light, and, though invisible to the eye, nevertheless affect a photographic plate, thus making possible a precise diagnosis of fractured bones, gun-shot wounds, digestive disturbances, and many other pathological conditions in which diagnosis without a radiograph would be mere guesswork.

In portraiture, photography is superior to any other graphic art, since the camera worker can, by judicious selection of lighting, pose and facial expression, render the character of the sitter quite as well as the draughtsman, this being the final test in portrait work, though it must be admitted that few portrait photographers meet this requirement.

Microphotography

The human eye and mind are, from a mechanical point of view, but imperfect instruments. Admirably as they serve the purpose for which they are designed, it is nevertheless impossible for them to observe with absolute accuracy. The camera, however, has no such limitations; its observations are accurate and its records unquestionable, so long as no definite effort is made to impair their exactness. For this reason photography is used not only in astronomy but in many other branches of science, among its most important uses being the making of records of microscopic objects.

A device carrying a photographic plate is attached to the eyepiece of a microscope; the plate being exposed affords, on development, a precise record of the subject under observation. It may be noted that in this case, as in astronomical photography, no camera lens is required; the microscope, like the telescope, projects an aërial image which is impressed on the plate. It thus becomes possible for the microscopist to study at leisure a photograph of the object that



By Paul L. Anderson
PHOTOGRAPH TAKEN IN A SNOWSTORM
New York

was in the field of the microscope, and thereby eliminate eye-strain and minimize the likelihood of overlooking any feature of interest. It is further possible to make lantern-slides from the negative so obtained. A lecturer by this means is enabled to show the photograph to a large group of individuals simultaneously.

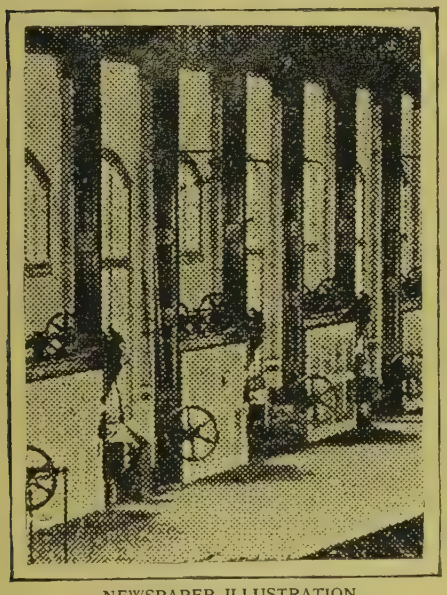
Photograph by Struss By courtesy of Cleveland Metal Products Co.
ADVERTISING ILLUSTRATION
An example of commercial photography

Though the photographic plate thus extends the usefulness of the microscope, this is not the limit of its value in this respect. Light is transmitted by waves, similar in some ways to waves in water, the light waves being disturbances of the light-bearing ether, an invisible, imponderable substance of zero density and infinite elasticity, which pervades all matter. (It must be understood that the ether has never been observed nor its actual existence proven; it is, however, a necessary assumption for the satisfactory explanation of the observed phenomena of light, so far as our present knowledge extends.) The distance from the crest of one wave to the crest of the next is known as the wave length, the lengths of the various light waves having actually been measured. The human eye is sensitive only to waves between about four-ten-thousandths and seven-ten-thousandths of a millimeter in length, a millimeter being about one-twenty-fifth of an inch, and an object is invisible in the microscope if its diameter is less than half the wave length of the light by which it is illuminated, since in that case the light waves bend around the object and meet on the other side. We cannot, therefore, see objects whose diameter is less than about two-ten-thousandths of a millimeter. But the photographic plate is sensitive to shorter waves than the eye; these waves are known as the ultra-violet. By illuminating the microscope stage with ultra-violet light it therefore becomes possible to photograph objects so small that they must forever remain invisible to the naked eye, unless, indeed, the progress of human evolution brings with it increased sensitiveness to the shorter wave lengths. In this connection it is interesting to note that there are organisms so small that they cannot be made apparent to

THUMB-PRINT ON DARK WOOD
Finger-prints are made visible by dusting with a fine powder, and are photographed with a special detective camera

us even by photography, though we are made aware of their existence by inductive reasoning from their observed effects.

In the case of some objects, a fuller knowledge of their character is gained if they are examined in a manner somewhat different from that usually adopted. One of the photographs given herewith shows the effect obtained by what is known as "dark ground illumination." Ordinarily, the light by which a microscopic object is examined passes through the slide, so that an opaque object is really seen only as a silhouette, but in dark ground illumination an opaque background is placed behind the object, and the light is allowed to fall on it from the sides. The object is thus made visible by the light that is refracted (that is, bent) into the lens of the microscope. In the present instance the effect seen by looking into the eye-piece was wonderfully beautiful, the crystals glowing with a brilliant yellow light against an intensely black ground.



NEWSPAPER ILLUSTRATION
Enlarged to show half-tone screen

Radiography

Some persons object to the inclusion of radiography as a branch of photography, since no camera or lens is used, but "photography" means, literally, "light-writing," and radiography is precisely this.

If the air be nearly exhausted from a glass tube, so that a high vacuum exists therein, and it be then sealed up, a current of electricity may be sent through the remaining air, setting up ether vibrations that pass out from the tube. These ether waves have the power of passing through many substances that are opaque to visible light, the X-rays, as they are termed, being totally invisible, though light waves to which the eye is sensitive are set up at the same time within the tube. Many persons confuse the greenish light from an X-ray tube with the X-rays, but the two are actually entirely different manifestations. The X-rays, though invisible to the eye, are nevertheless able to affect a photographic plate strongly, so that photographs may be made through solid objects. For example, if a sensitive plate be laid on a table and the arm or the hand placed on it, and an X-ray tube is brought near the arm, a photograph results in which the bone is represented as a dark area and the flesh around it as lighter, this being, of course, simply a shadow picture. This affords an intensely valuable aid to diagnosis, and a good surgeon will, if possible, first radiograph a fractured bone before setting it, unless the circumstances are very

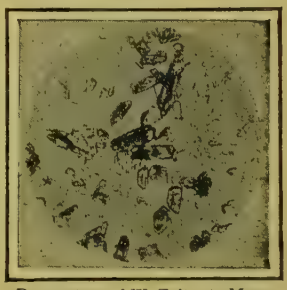
STRIP OF MOTION-PICTURE FILM

Actual size. The photography consumed five-eighths of a second, or just long enough for the subject to turn her head

exceptional. The value of radiography is not, however, confined to fractures, but extends to wounds (it is of great help in locating metallic fragments or other foreign bodies in a wound), to many intestinal disorders, and to the diagnosis of other diseased conditions.

Though not strictly bearing on photography, it is interesting to note that the X-rays, like the "gamma rays" (γ-rays) of radium, are in reality ether vibrations of very short wave length, and like the shorter waves (the ultra-violet) in sunlight, possess curative powers in some skin disorders and also the power of causing terrible burns. Sunburn does not result from exposure either to visible sunlight or to the heat of the sun, but to the ultra-violet rays; and an X-ray burn is identical with sunburn. In extreme cases the X-rays may cause complete destruction of the skin and even cancer, and before the properties of the X-rays were so well known as at present many operators lost hands, and some their lives, as a result of excessive exposure to the rays. At present, X-ray workers shield themselves, and, when necessary, the patient, with lead screens, that metal being practically opaque to the rays.

(A)



By courtesy of W. Faitoute Munn

(B)

MICROPHOTOGRAPH OF CRYSTALS OF BRUCINE SULPHATE
(A) By transmitted light
(B) With dark-ground illumination

Color Photography

Many workers have tried, with varying success to devise a means whereby photography could be made to reproduce not only the outlines and gradations of natural objects but the colors as well, and there is now available a method of great worth for this purpose. In brief, it consists in making, by one exposure in an ordinary camera, a set of three-color nega-

tives, each of which represents that portion of one of the primary colors—violet, green and red—which was reflected from the subject. That is, one negative represents the violet "sensation," the second the green, and the third the red. Prints are made from these negatives in suitable dyes on transparent films, which are cemented together, one over the other, thus giving a true color photograph, in which the secondary and tertiary colors—blue, yellow, orange, purple, brown, etc.—are obtained, as in painting, by the mixture in proper proportions of two or more of the primaries. This is the first method of color photography to possess the great advantage of producing prints—not transparencies, so that any number of duplicates may be made. No special camera is required, and the process is within the reach of any careful amateur. The writer believes the artistic value of color photography is relatively slight—a black and white art is capable of the fullest intellectual expression, and color is merely sensuous in its appeal. After much experiment with different color processes, he finds his own monochrome (single tone) prints more satisfying than the color work. However, the value of color to the scientific worker is incalculable, as will be realized at once on considering only one of the possible applications—namely, the study of skin affections. It is interesting to note that several methods have been devised for the reproduction of natural colors in motion-picture work—the familiar method of coloring the positive film by hand being only an approximation to truth. But none of those presented up to this time is fully satisfactory, though the prospects of future development are good.

By courtesy of Dr. T. W. Harvey

RADIOGRAPH OF NORMAL HAND

When we consider the manifold and widespread uses of photography and the pleasurable diversion that it affords, it seems safe to say that there is no other form of industry not an actual necessity that is of such importance to the welfare and happiness of the human race.

SUPPLEMENTARY READING

PICTORIAL PHOTOGRAPHY, PRINCIPLES AND PRACTICE *By Paul L. Anderson*

INSTRUCTION IN PHOTOGRAPHY *By Sir William de W. Abney*

SCIENCE AND PRACTICE OF PHOTOGRAPHY *By John R. Roebuck*

PHOTOGRAPHY OF TODAY *By H. C. Jones*

THE ARTISTIC SIDE OF PHOTOGRAPHY *By A. J. Anderson*

***Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

One summer afternoon, some years ago, I went into a front room of my home and drew down the window shades to shut out the glare and heat. The room became quite dark, but, in one of the shades, there was a small hole, through which the sunlight penetrated—casting on the white wall opposite, vivid images of all the objects in the street outside. I had before me a full-color, moving picture of the panorama of life that was passing the window.

Here was the original "camera obscura" ("dark chamber"). If one placed in the small hole in the shade a glass lens to give a sharp image, and substituted for the wall a movable screen, on which the projected objects could be focussed, one would have the essential elements of a modern camera. Through just such simple experiences as this important scientific discoveries are sometimes made.

★ ★ ★

For many years photography was largely confined to portraiture and the faithful reproduction of objects and scenes. All that was expected of a camera was to "make a picture" of a thing. Within the last forty years, however, as reproductive processes have been invented, photography has come to be one of the most useful of arts. Beginning about 1883, the quality and character of the illustrations in our magazines and books changed radically. Where, previously, there had been nothing but hand engravings of one sort or another, *photo-engraving* appeared, and, with that, the horizon of magazine illustration extended far beyond the reach of the liveliest imagination. Who could have foreseen, then, in the first photo-engraving processes, such possibilities as photographic printing in full colors, or moving picture films? Today, pictorial illustration depends on photography, and there is apparently little or nothing in life beyond the reach of photographic art. It discloses the internal arrangements of human anatomy; it makes a record of the affairs of the heavenly bodies; it pictures things that the human eye cannot see; it is even potent in the realm of mystery, for have we not seen photographs of ghosts(?) reproduced from spirit seances? When objects and situations in life that do not exist are wanted, the camera can, by some trick or device, create them for us. There seems to be no limit to the possibilities. Each wonder displayed in photographic reproduction gives way to some new effect more wonderful still.

★ ★ ★

Consider briefly a few of the wonders of modern photography. First and foremost, and most spectacular of all, is the moving-picture film. Then, in the world of practical things, we have the telephoto-lens—a combination of the telescope and camera—that takes pictures of objects far beyond the reach of the naked eye. This enables one to photograph the head of a gargoyle on a distant cathedral, or the fledglings in an eagle's nest, or a mountain goat on a crag high up a mountain side. Then there is the swinging camera, by means of which a wide sweep of view can be included in one plate. A device of great practical value is photo-telegraphy, by which portraits for purposes of identification can be sent by cable and by wireless. In modern warfare the uses of the camera are many and varied. They include panoramic photography, photographing by moonlight, photographing of projectiles in the air, even photographing the noise of a gun by recording the vibrations due to the displacement of the air, photo map-making, photo surveying from the air, and the aviation gun camera. Radiography, too, must be mentioned—the X-ray and its use in surgery.

★ ★ ★

While all these wonders have come to pass in practical service, photography has likewise grown and expanded in the field of fine art. There are photographic art schools, and clubs and exhibitions—all for the purpose of cultivating and developing the camera to the finest forms of expression. We have highly cultivated and skilled photographers who are true artists, and who are engaged in employing photography as a means to fine art achievement. Among such artist photographers in this country mention should be made of Mr. Paul L. Anderson—the author of the present article; Arnold Genthe, who, besides his wonderful portraits, has, by his art, preserved for future generations the scenes of old San Francisco—especially Chinatown—that have now passed away; Gertrude Käsebier, Baron de Meyer and Jan de Strelecki, Stieglitz, Eyckmeyer, Steichen, Sümons and so many others that the list would fill this page.

W. D. Moffat

PHOTOGRAPH BY H. PETERSEN. FROM "VIRGIN ISLANDS OF THE U. S. A."
BY LUTHER K. ZABRISKIE. COURTESY G. P. PUTNAM'S SONS.

ONE

COLUMBUS, despairing of finding individual names for all the islands he sighted, called the rocky archipelago which is the subject of this number of The Mentor, "'The Virgin Islands,' after Saint Ursula and her martyred maidens." The group designated by this name includes upwards of fifty islands and islets, several of which are owned by Great Britain. When Spain ceded Porto Rico, ownership of three of the Virgin Islands—Vieques, Culebra, and Culebrita—passed to the United States. St. Croix is not one of this group, according to strict geographical classification, but, together with the Virgin Islands, is one of the Leeward Islands group, which comprises, among others, St. Kitts, Nevis, St. Christopher, Antigua, Guadaloupe and Martinique.

Over a century and a half after Columbus discovered the Virgin Islands, in 1493, adventurous Danes cast anchor in the harbor of St. Thomas, but soon forsook this little isle of the southern seas for another island at the mouth of the Hudson River—the Island of Manhattan, where the Dutch had settled. The Dutch and the English, the French and the Spanish, had previously visited the islands we call St. Thomas and St. Croix when, in 1666, the Danish made another unsuccessful attempt at colonization. Six years later, the Danish West India and Guinea Company fathered a settlement from which descended all later colonies.

By the year 1680, over three hundred settlers were established on St. Thomas. The principal industry was the raising of tobacco. Half the population was composed of slaves. To further increase their number, King Christian V of Denmark decreed that natives of Africa be brought across-seas in ships specially engaged in slave traffic. All the European countries that had undertaken to develop the agricultural resources of the West India Islands had found after repeated disasters that only black men were fitted to work in the tropics. Besides tobacco, estates were now planted with sugar cane, sprouts of which were obtained from Tortola, another island of the Virgin group, twenty miles east of St. John, and owned by the British.

The British still had a jealous eye on the fine harbor of St. Thomas, and to prevent attacks by them and by the French, who had taken St. Croix from the Spanish in 1650, the Government of Denmark built, about 1690, a fort and a thick-walled tower overlooking the bay and its peaked islands. In 1701, a priest, Father Labat, made a voyage to the islands of America and wrote a book that contained the first lengthy description of the well-cared-for estates, the streets and neat houses of St. Thomas. Europe being then at war, and Denmark a neutral nation, this broad haven at the crossroads of travel was the refuge of ships escaping pursuit, and boasted a brisk commerce. Many tales of piracy date from these rousing days of trade and warfare.

St. John was permanently settled by the Danes in 1716. The French, Knights of Malta, and "miscellaneous rovers" occupied the island of St. Croix, thirty-five miles south of St. Thomas until, in 1733, France sold it to Denmark. King Frederick V, in 1755, purchased the Danish West India Company's land, forts, buildings, slaves, merchandise and ships for $1,500,000, and made St. Thomas a closed port. However, within a decade the former policy as to world commerce was resumed by order of the king, and during the pre-Napoleonic wars St. Thomas was the meeting-place of vessels flying the pennants of all the warring nations. "Things were lively in those days," writes Mr. Luther Zabriskie. "Money flowed like water into the coffers of the merchants. Population increased, the town limits were extended, stores and dwellings were rapidly built, and thousands of refugees and adventurers sought these shores for the purpose of traffic."

But St. Thomas was not to remain a neutral port for long. In 1801, England blockaded the island and held it for ten months. The British flag again flew over the islands between the years 1807 and 1815, as a precaution against seizure by Napoleon. In the readjustment of nations following the events of the latter year, the group was restored to Denmark. Once more, St. Thomas became the queen port of the West Indies, and exacted tribute from the hundreds of ships that plied this golden lane of commerce between the Atlantic and the Pacific. On the birth date of American Independence, July 4, 1848, the black bondmen of the Danish West Indies were freed by decree of the Crown, and forthwith they forsook their agricultural occupations. The prosperity of the Danish islands was affected when profits decreased in the production of cane sugar. The abolition of slavery and the development of the beet sugar industry both had a share in bringing about this condition. Formerly, St. Thomas had been the sole port of call for steamers carrying cargoes of goods that were in demand on neighboring islands, including Porto Rico. Now other lines of transportation were organized, and direct communication was established between Porto Rico and the north. By the year 1866, planters and officials of the Government were ready to consider the proposals of Secretary Seward that the islands should become the property of the United States.

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ILLUSTRATION FOR THE MENTOR, VOL. 6, No. 13, SERIAL No. 161
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PHOTOGRAPH BY E. M. NEWMAN

CHARLOTTE AMALIE, VIRGIN ISLANDS, DANISH GOVERNMENT BUILDING NOW U. S. MARINE HEADQUARTERS

THE need of the United States for a naval base to prevent blockade-running during the Civil War influenced President Lincoln and Secretary Seward to urge the purchase of the Danish West Indies, in order to obtain the rights to the harbor of St. Thomas. Actual negotiations were not undertaken, however, till after Lincoln's assassination. The first proposals were made to Denmark when she was smarting under the loss of Schleswig and Holstein, after the victory of her Teuton enemies. Secretary Seward visited the islands in the year 1866, and offered five million dollars for the group. But Denmark hesitated to conclude arrangements, lest she displease her victors. Furthermore, Napoleon III refused his consent to the transfer of St. Croix, and according to the agreement entered into at the time of the purchase of St. Croix from France, Denmark could not dispose of this island to any other country without the approval of the original owner.

Seven and a half million dollars was the price finally named in 1867 for the two northern islands, and the Danish Senate and the inhabitants of the island voted in favor of the transaction. In the United States Senate the chairman of the Foreign Relations Committee was Charles Sumner. As an opponent of President Johnson, it is believed he feared the purchase of the Danish West Indies, following the Alaska purchase, would bring too great popular favor to the Administration. At any rate, no action was taken on the treaty when it was presented. The opposition of Sumner to the Grant administration further delayed ratifications, and, in 1870, the treaty was allowed to lapse.

The Danes again showed themselves willing to sell the islands during the presidency of Harrison and Cleveland, but met no response on the part of the United States. After the Spanish-American War, proposals were again renewed. A treaty was drawn up by John Hay in 1901, and the purchase price fixed at five million dollars for the three islands, St. Croix being included by consent of France. The United States Senate confirmed the second treaty in February, 1902, but this time the Upper House of the Danish Parliament failed to ratify. German influence in Denmark was held accountable for this attitude, since German steamship interests would be furthered by the retention of the islands by Denmark.

In 1911, the transfer was once more broached, but again it failed of consummation. The question last came up for discussion in August, 1916, and again negotiations would have been fruitless but for the insistence of the Danish premier, who threatened to dissolve parliament and participate a general election if Government and people did not consent to the disposal of the islands. On January 17, 1917, terms were finally concluded between the two countries.

At a farewell service held in St. Thomas after the ratification of the treaty of cession had been exchanged by Secretary Lansing and the Danish Minister at Washington, the pastor paid this just tribute to the rule of Old Denmark, that had lasted, almost without interruption, for nearly two hundred and fifty years: "Of what are our thoughts, now that the end is reached? Of oppression and misrule? Exploited resources? A people crippled with taxes to enrich others? Education systematically neglected? The rule of the few over the many? Justice sold to the highest bidder? Government without heart or sympathy with the poor? Any or all of these things so often the accompaniment of colonial rule? No. At the bar of history the account is rendered. Today we may think of the solid good of the past, and pray that the new flag shall stand for all those things for which the old flag has stood."

On March 3, 1917, an act was approved by the United States Congress to provide a temporary government for the people of the Danish West Indies, and on the last day of that month the formal transfer was sealed by the payment of a treasury warrant of $25,000,000 by the United States Secretary of State to the Danish Minister in Washington. Telegraphic advice was immediately sent to representatives of the two Governments at St. Thomas. Upon receipt of the messages the ceremony of the transfer was enacted at the Saluting Battery, St. Thomas, by the retiring Danish governor and the acting United States governor (commander of the U. S. S. *Hancock*), in the presence of naval, military and civil guards and an impressive assemblage of citizens. The transfer was simultaneously celebrated at Christiansted and Frederiksted, St. Croix. On April 7, 1917, the first governor of the islands, Rear Admiral Pollock, late Chief of Naval Intelligence, was officially welcomed and installed in office.

The inquiry, "Are the islands worth the expenditure of $25,000,000?", is answered by present-day students of naval tactics. "We have at least the value of the twenty-five millions in these offensive times in keeping any foreign power from getting a foothold there. We have bought the finest site strategically, logistically and tactically for a first-class naval base on the Atlantic seaboard."

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PHOTOGRAPH BY E. M. NEWMAN

CHARLOTTE AMALIE ST. THOMAS VIRGIN ISLANDS

UNDER the old régime the executive power of the Danish Islands was vested in a governor appointed by the king. For six months of the year his residence was on St. Thomas; for the rest of the year it was on St. Croix, thirty-five miles distant. St. Thomas and St. John comprised one political part, St. Croix another. Two colonial councils made the laws, a proportion of the members being appointed by the Government, and the remainder being elected by the islanders for a term of four years. Besides, there was a Danish police force that presented a brave appearance on dress occasions in uniforms of pale blue and white, with high hats crowned by bright red pompoms. Danish judges were appointed for life. The whipping-post, we are told, still menaced offenders under Old Country rule, and heavy penalties were visited upon natives convicted of theft. Males twenty-five years of age, born on the islands, or resident there for five years, who were possessed of a stipulated amount of property and were of unassailable character, were entitled to the franchise. As far as possible, the Danish Colonial Law affecting the islands will be maintained by the United States.

The Colonial Treasury supported the Evangelical Lutheran Church as the national church of Denmark, though various other denominations were and continue to be represented in the islands. Lutheran and Reformed Dutch congregations have worshipped on St. Thomas for over two centuries. Missionaries of the Moravian Church began their ministrations in the year 1732, and, under Government subsidy, have had an important share in the education of the island children, both black and white. The education of Roman Catholic children has been in the hands of the Catholic Church. Free schools and schoolbooks were provided by the Danish Government. Denmark's liberality is exampled in the fact that though both Danish and English were taught, the study of Danish was not compulsory. Though Danish has been the official language, English has long been that of the people. Under United States control it is likely that American teachers will replace some inefficient native black teachers, as has been done with excellent results in Porto Rico. Under the Danes, the school year was twelve months long, all children between the ages of seven and thirteen being required to attend classes six days a week, three hours a day. Morning hours were reserved for the session of the lower grades and the later sessions for the upper grades. Three weeks' vacation was permitted in September. The high percentage of literacy in the islands may in part be credited to a system of fines in force for many years. Unless officially excused, a pupil arriving an hour late at school was subject to a fine of one to five cents. For a day's absence without permission a fine was imposed of ten cents for the first day and five cents for each additional day of absence. The fine for absence from examinations was fixed at fifty cents for each offence. According to Government statistics, all but a very small proportion of the islands' inhabitants can both read and write. The Danish system of education will to a great extent be continued by the United States, exclusive of denominational training. There are no high schools in the islands. On St. Thomas there are two private academies.

The abolition of slavery and the prominence of St. Thomas as a port have so impeded the development of the island's natural resources that today most of the produce consumed by St. Thomians is imported from nearby islands and from the United States. Farm laborers are given thirty-five cents a day, but as dock laborers a dollar a day can be earned. On St. John the soil is used for the cultivation of bay and lime trees, and a few hundred head of cattle find grazing ground on the hilly slopes. Thirteen thousand acres on the island of St. Croix are devoted to the growing of sugar cane, 2,000 acres to cotton, and 30,000 acres to a variety of crops chiefly useful for cattle fodder. Consular reports give the main manufacturing industries of the islands as sugar, rum and molasses on St. Croix; bay rum on St. Thomas; bay oil, bay rum and the products of the lime tree on St. John.

The hurricane of October 9, 1916, was the most disastrous to real estate and commerce that had been experienced in the islands since 1867, the loss being estimated at about $1,500,000. The full force of the wind fell upon St. Thomas, though the greatest number of deaths—about fifty in all—were reported from St. John. The accustomed signals—two guns fired at a short interval—gave warning early in the afternoon of the approaching high winds Accompanied by heavy rain, the wind blew at the rate of 125 miles an hour. It bared hills of turf and trees, lifted houses from foundations, wiped out villages, laid cocoanut groves low, stripped bay trees of their leaves, destroyed oil stills and sunk ships in the harbors, or drove them ashore and left them but disordered piles of wood and metal. On June 25th of each year it is the custom of the islanders to hold services of prayer to ask protection from the raging trade-winds that blow across the Atlantic from southwestern Europe, and on October 25th they give thanks if the prayer has been answered.

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PHOTOGRAPH BY E. M. NEWMAN

CHRISTIANSTED, ST. CROIX, VIRGIN ISLANDS

SINCE the age of the discoverers, the harbor of St. Thomas has welcomed the craft of the sea-going nations of Europe—craft sometimes black of prow and sinister in design. Father Labat recounts the tale of a French privateer, Legendre the Blond, who on an autumn day in 1695 ran into the harbor at Charlotte Amalie,

robbed the Brandenburgh warehouse of 24,000 riksdollars (about $13,000), and relieved the employees, from director-general to humblest clerk, of everything except the shirts they wore. Accomplices of French privateers, with the connivance of authorities at St. Thomas, once sent a warning that enabled a robber fleet to reach France with a sum equivalent to $400,000 stolen on the British island of New Granada to enrich the war chest of Louis XIV. In April, 1699, there arrived a notorious "rover of the sea" at the harbor gate of St. Thomas. "Well outside gun range," he hove to, and asked refuge from the pursuit of English ships. It was none other than Captain Kidd that begged this hospitality, and a governor of less tolerant ideas than some others that had represented Denmark refused him admission. Later, when the pirate secretly disposed of his ill-gained cargo to island traders, part of it—tens of bales of fine muslin valued at 12,000 pieces of eight—was stored in a St. Thomas warehouse. Captain Kidd departed for New York, and from there was sent to England for trial on the charge of piracy. The taller of the two towers on the hills behind Charlotte Amalie is the traditional stronghold of Black Beard Edward Teach, "one of the realest, blackest and bloodiest pirates that ever graced the Spanish Main. He came to his own at the cutlass of his Majesty's Lieutenant Maynard in the year 1718." Forty-five bays on the coast of St. Thomas and thirty inlets that indent the shore of St. John were in those days a well-considered aid to the dark dealings of men and ships.

It was at Magen's Bay, a large inlet on the north side of St. Thomas, that surveys recently made by the American Indian-Heye Foundation of New York uncovered the remains of a primitive settlement. Vessels found in burial mounds were without decoration, and were in other ways unlike those that have descended to us from the first inhabitants of Porto Rico and San Domingo. Archeologists accept this as proof that the aborigines of the newly-acquired American group were not Arawaks, as previously supposed; nor do the crafts disclosed by research reflect the Carib culture of the West Indian islands farther south. As yet, the tribe that hunted the cottonwood groves of St. Thomas, built canoes and fished the swarming bays has not been classified. It is hoped that future excavation on the Virgin Islands of Great Britain may aid identification. On the island of St. John there are no indications of aboriginal life beyond a few rock carvings, from which evidence it is judged that this island had no village site, but was used for ceremonial meetings. On St. Croix, ten village sites have been discovered by various investigators.

Visitors to St. John find special interest in the bay rum industry. Here the bay tree is indigenous to the soil, no orchards having been set out by man. Three times a year the leaves are picked by nimble youngsters, who throw down twigs bearing perhaps a dozen leaves to women standing ready with bags that have a capacity of sixty to seventy pounds. Oil distillers pay two cents a pound for the leaves and the labor of picking them. When the essential oil is extracted from the leaf, it is mixed with rum or alcohol and water and further distilled to make bay rum. The latter process is mainly carried on by St. Thomas firms. The average price of bay oil in the islands is five dollars a quart; of bay rum, seventy cents a gallon.

"If you love beautiful scenery," says the author of "Isles of Spice and Palm"—"if you are interested in strange people and quaint ways, visit that chain of island gems which stretches in a broad curve from Porto Rico to the tip of South America, and which is known as the Lesser Antilles. By days of travel these islands are close at hand; by customs, manner and life they are remote as the Antipodes." Admiral David Porter called St. Thomas "the keystone to the arch of the West Indies." Transportation from New York to this sunny isle of storied days and fortunate location is by the Quebec Steamship Line, which maintains comfortable ships on regular nine or ten-day schedule. The trip each way consumes a little over five days. A call is also made at Frederiksted, St. Croix, (and in the sugar season at Christiansted), before the steamer proceeds to South America. Between Charlotte Amalie and San Juan, Porto Rico, a voyage of about fifty miles, there is a monthly steamer service. Fast sailing vessels also carry passengers to and fro among the islands.

Coral Bay, St. John, is twice as deep as the hill-bound harbor of St. Thomas, and is large enough to shelter at one time four or five hundred vessels. It is actually a better haven than that of St. Thomas, but the latter is closer to the trade routes. Before the World War it was not unusual for two hundred ships to call in one year at the port of Charlotte Amalie.

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PHOTOGRAPH BY E. M. NEWMAN

STREET IN FREDERIKSTED, ST CROIX, VIRGIN ISLANDS

THE people of the Virgin Islands, in the words of one who knows them well, "are intelligent, agreeable, and well-informed, and many of them are educated and refined, though to a great extent deprived of broadening influences through their isolation. They are peaceful and industrious, and crimes of violence are unknown, but they have needed capital for the development of their resources and incentive. From the standpoint of one who has lived in the islands, I am frank to state that the 'negro problem' here will hardly be the problem—difficult of solution—which at first glance it seems to be; for while most of the leading merchants, tradesmen and minor officials are men in whose veins runs colored blood, they are often more courteous and considerate than those of white skin occupying similar position in America. Hospitality and good cheer abound everywhere, and the prevailing atmosphere is one of cheerfulness, now further stimulated by reason of the transfer to the United States. Class distinction rather than color distinction exists.

"The laboring classes are generally courteous and respectful, and with the minimum of creature comforts enjoy life as keenly as do those in the middle and upper classes. We will not have the problem of converting a hostile people to our ideas of life and government, as was the case in Porto Rico, where customs, language and sentiment were adverse to us, because not only is English the universal language and the associations American, but the people have ardently wanted American rule, as was evidenced by the popular vote in all the islands in favor of the transfer. The great problem will be to introduce necessary changes gradually, and to furnish the laboring classes, under prevailing wage conditions, with a livelihood and a chance to develop in accordance with modern ideas of labor. A cheerful and hopeful people come under our government, and a tolerant attitude on our part will do much to cement a bond of friendship and materialize a hope of years."

The problems of St. Thomas and its sister islands are complicated by the disinclination of the negro population for pursuits of the soil. We are told that "looking out across the wide sweep of the island of St. Thomas, one sees scarcely an unruined habitation, and only a very few patches of cultivation, whence come those meager handfuls of vegetables seen of a morning in the long sun-stricken market—vegetables outlandish and twisted, as though they had been wrung from the unwilling earth in pain." Wilbur Steele, a recent traveler in the islands, says of the natives that they no longer wish to till the soil. "They have come back to the sea, and it was coal that brought them. Standing on the boat deck of the steamer alongside the dock, one looks down upon a river of coal, flowing ceaselessly, hour after hour, through the hot day, taking its source among the black tablelands beyond the dock and emptying its burden in the vitals of the ship underfoot. The river is perhaps four feet wide, the width of two baskets touching rims, each basket carrying sixty to sixty-five pounds of coal, or a comfortable load for a colored woman's head. Beneath it, as beneath the belly of a Chinese dragon, one catches glimpses of brown bare feet moving rhythmically. . . . Afterward, when the work is done and the vessel sated, they go away through the town, as swaggering a crew of long-shore-women as one would care to see, slapping shoulders and calling names. They are full of an exuberant gaiety which tons of coal cannot crush." Mr. Steele visualizes for us a bit of Charlotte Amalie, pleasant to remember: "A sun-drenched street with a yellow pavement and close walls of pink and violet and flame and ultramarine; big studded doors set deep in recesses; windows sealed with shutters the color of malachite; and, of a sudden, the mouth of a dark corridor leading away through the internals of a great flat stucco block and down into the glare of the street below. There was something fascinating about that intimate vista. Arch succeeded upon Spanish arch, thick in masonry; somewhere a lacework of sunshine mysteriously procured, traced the floor of the corridor; beyond it showed a dim net of fronds and the ghost of a fountain—a world languorous, remote, and self-contained."

To this little world of dimmed glory and future hopes, of adventure and opportunity, the United States has fallen heir. For its protection hundreds of American Marines have already completed effective fortifications on hills commanding the harbor of St. Thomas, and the passage to the Caribbean Sea.

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THE MENTOR · DEPARTMENT OF TRAVEL
AUGUST 15, 1918

THE VIRGIN ISLANDS
of the UNITED STATES *of* AMERICA

By E. M. NEWMAN, *Lecturer and Traveler*

VIEW OF CHARLOTTE AMALIE, ST. THOMAS

MENTOR GRAVURES

ST. THOMAS HARBOR BEFORE THE DANISH FLAG CAME DOWN · ST. THOMAS, DANISH GOVERNMENT BUILDING, NOW U. S. MARINE HEADQUARTERS · CHARLOTTE AMALIE, ST. THOMAS · CHRISTIANSTED, ST. CROIX · STREET IN FREDERIKSTED, ST. CROIX
COUNTRY ROAD, ST. CROIX

THE Virgin Islands formerly known as the Danish West Indies were purchased by the United States for the apparently exorbitant sum of $25,000,000. While the group comprises more than fifty islands, but three are inhabited. These are St. Thomas, Santa Cruz or St. Croix (sahn krwah), and St. John.

Denmark received from the United States an average price of $295 per acre. Alaska was purchased at a cost of two cents per acre, and the Philippine Islands cost us about twenty-seven cents per acre. For strategic, economic and political reasons the Virgin Islands are worth far more to us than their purchase price. We were in need of a naval base to protect the Panama Canal, and the harbor at St. Thomas provides the best naval station in the West Indies.

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The islands were discovered by Columbus in 1493, on his second voyage to the New World. Since then the inhabitants have been under Spanish, British, French, Dutch and Danish rule. For over two hundred years the Danish flag has flown above these islands of the Virgin group. Repeatedly the United States has tried to acquire them. In 1865 Secretary Seward offered five millions of dollars, which was increased two years later to $7,500,000. Again, in 1901, negotiations were entered into with Denmark, but Germany intervened, and once more the project failed.

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TRANSFER OF THE DANISH WEST INDIES TO THE UNITED STATES

Secretary Lansing handing Constantin Brun, the Danish Minister at Washington, a Treasury Warrant for $25,000,000. The others in the group are Secretary Daniels, Secretary McAdoo, and Rear-Admiral James H. Oliver, first appointee to the Governorship of the Virgin Islands of the United States of America

A price was finally agreed upon, and the transfer of the islands took place March 31, 1917. The ceremony was most impressive, though Governor Oliver, appointed by President Wilson, could not arrive in time to take part in it. Commander Pollock, of the gunboat *Hancock*, was at Santo Domingo and was ordered to proceed at once to St. Thomas and take possession in the name of the United States. He arrived on the day of the ceremony, and was met by the Danish governor, Danish officials, and officers and marines of the Danish gunboat *Valkyrie*. In the presence of a large assemblage the Danish flag came down after nearly two and a half centuries of rule, and the Stars and Stripes was raised over the former Danish Government buildings, over forts, and on various private flagstaffs. Many of the Danes were in tears. A number of them had been born on the islands and knew no other home. To them it was a sad event, but practically all realized that the transfer was best for the people generally and for the future of the islands.

MAJOR SALLADAY AND STAFF

Commanding the United States Marines stationed at St. Thomas—on the steps of the barracks, Charlotte Amalie

The Commerce and People

CAMP OF AMERICAN MARINES
Beneath the walls of the fort on the water-front, Charlotte Amalie

Besides Charlotte Amalie, a town of about 8,000 inhabitants, there are a few scattered settlements on the island of St. Thomas. Some years ago the harbor was a free port and Charlotte Amalie enjoyed a considerable commerce. Immense warehouses were built, and merchants from Central and South America came to the island to purchase merchandise. When the port was no longer free, its commerce gradually dwindled and the harbor was almost deserted. Ships called only to go into drydock or to coal. It now remains for Uncle Sam to restore its former trade with our sister republics to the south.

Little or nothing grows on the island of St. Thomas, and from an agricultural standpoint it offers but few opportunities. Its inhabitants, aside from about two hundred whites, are all negroes. The Danes were unable to teach them their language, and practically all speak English with that peculiar drawl that has become familiar to us in Jamaica and other islands in the West Indies. The blacks welcome the coming of Uncle Sam. They look upon us as a Santa Claus, who will bring them untold blessings and wealth beyond their dreams. They are a simple, childlike people, with bodies of men and women but with the intellect of the average child.

Charlotte Amalie

Charlotte Amalie is a clean little town with regular streets, and buildings built of stone and brick faced with cement. The Danes are a cleanly, orderly people, and this is evident in the appearance of the towns on the islands.

OLD DANISH FORT, ST. THOMAS HARBOR

Hurricanes are frequent, and at times do great damage. A storm of several years ago unroofed many of the houses, tore down palm trees and destroyed most of the foliage. Traces of the hurricane may still be seen, but its effect is gradually being obliterated.

Many steamers have been wrecked on these islands. Among numerous sailors stranded on St.

Thomas was a Frenchman named Louis Monsanto. He founded on the shore of Krum Bay what he calls the graveyard of ships. Lying about are several odd figureheads that once adorned the bows of lost boats. Each has its story of thrilling escapes and tragic loss of life to awe the listener.

VIRGIN ISLAND TAXI-CAB AND EXPRESS SERVICE

Marines now police the island, and to them has been entrusted the task of restoring order, mounting guns for the protection of the harbor, and firmly establishing American rule.

ENTRANCE OF THE GRAND HOTEL, CHARLOTTE AMALIE

From "The Virgin Islands of the United States of America," by Luther K. Zabriskie, G. P. Putnam's Sons, Publishers

An Island Bluebeard

These islands were once infested by pirates; in Charlotte Amalie we see Bluebeard's and Blackbeard's castles. An English pirate who married a woman from Charlotte Amalie went away on one of his piratical expeditions, entrusting to his wife a small box which he told her not to open unless he did not return in six months. After two months, woman's curiosity got the better of her and she opened the box. She found therein just seven letters, but they were seven compromising letters written by women of Charlotte Amalie. She did not kill her husband, instead she invited the women to an afternoon tea at her home and poisoned all seven. So, you see it was not, in this case, the man who was the "bluebeard," but the wife—a sort of bluebearded lady. She was arrested, tried and convicted, and was condemned to be burned at the stake. The eventful day arrived. Fagots were piled high about her, the torch was about to be applied, when the pirate ship appeared in the harbor, the pirate and his crew came ashore, and the wife was rescued. Then she sailed away with her husband, and they "lived happily ever after."

THE VIRGIN ISLANDS

St. John and St. Croix

The smallest of the inhabited islands is St. John. The few people living there are employed in picking bay leaves. The bay tree thrives on the island, and the oil obtained from its leaf is used in the making of bay rum.

The largest of the islands is St. Croix. It is about twenty-one miles in length and from four to fourteen miles in width. Rich and fertile, its soil produces chiefly sugar, a product capable of still further industrial development. The principal difficulty encountered is in obtaining good water. There is but one stream on the island, and except for the water from this stream the people must depend on rain water stored during the rainy season. One of the first duties that we have before us is the boring of artesian wells, as all the islands are in great need of good water for drinking and commercial purposes.

COVERED WALK
Christiansted, St. Croix

There is a primitive sugar mill on the island of St. Croix that is owned by Danes. One of the owners told me that the day the islands were transferred to the United States the negro employees formed a union and struck. They lost no time in availing themselves of the advantages that organized labor enjoys in a great republic.

The seat of government of this island is Christiansted, a town of about 4500 people. It is a neat, substantial little place, with covered colonnades extending through the business section of the town. These covered passageways enable one to walk about without being exposed to the rays of a tropical sun.

"GOVERNMENT HILL," CHARLOTTE AMALIE
Showing Administration Building (upper right-hand) and Governor's House (flying American flag)

It was from Frederiksted, the chief port of St. Croix, that Alexander Hamilton came to America. Born on the

From "The Virgin Islands," by Luther K. Zabriskie, G. P. Putnam's Sons, Publishers

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island of St. Nevis, his mother died when he was still an infant. He was then sent to an aunt who lived on St. Croix, and it was there that he gave evidence of the brilliant mind that in later years made him one of the most conspicuous figures in American history. It is a strange coincidence that over a hundred years after Hamilton left St. Croix it should come into possession of the nation he served so brilliantly. What might George Washington, "The Father of his Country," say if he could know that the birthplace of the young West Indian attorney, to whom he looked for legal counsel, was now part of the great republic in whose establishment each of them had such an important share?

PLOUGHING ON ST. CROIX

There is but one paved highway on St. Croix, and that extends from Christiansted to Frederiksted at the west end of the island. A macadam road twenty-one miles in length connects the two towns, and over this highway passes practically all the traffic on the island. Here we see a curious procession of natives driving all kinds of queer vehicles drawn by diminutive ponies or donkeys.

Women carry upon their heads loads that would stagger the average man. They are able to balance almost anything, and one sees them carrying boxes, barrels, and even pianos, although the latter require about four women to balance their weight.

Agriculturally, St. Croix offers a good field for development. Cotton

VIEW
LANTA-
ISLAND
ROIX

ON A SUNNY ROAD, ST. CROIX

as well as sugar can be grown profitably, and, with modern American methods, its products can be materially increased.

System of Education

When the Americans first took possession there was much confusion. Danish law conflicted with American law, Danish customs differed from American customs, there was a Danish postmaster and an American postmaster; but these things are now straightened out and order has been completely restored.

The Danish method of instruction, which has long been in use, has been continued by the United States. The system differs from our own in that the schools are in session practically the year round, and religious training is required. The religious training in the schools will be discontinued, but otherwise the Danish method will obtain.

Virgin Islanders pride themselves on their low percentage of illiteracy. Only about two per cent. of the inhabitants are unable to read and write.

The Importance of St. Thomas

Commercially, the island of St. Thomas is destined to play the most important part of all the group, as it is a favored way-station on the route from European ports to the Panama Canal. Its lost trade can be regained, and it may be possible for American manufacturers to display

samples of their wares in especially built warerooms at Charlotte Amalie. This would enable the merchants of Central and South America to make their purchases again as they once did. It would obviate the necessity of a long journey to New York, and the port of St. Thomas would be a convenient place in which to see American-made goods and place orders.

LONGSHOREWOMEN COALING A SHIP
St. Thomas Harbor

The gold paid by the United States to Denmark for the Virgin Islands weighed 48 tons. Like everything else, the islands have gone up in price since the first negotiations undertaken fifty years ago, but it was necessary for us to have them, as with St. Thomas in our possession and fortified no foreign power without a naval base in this part of the world would dare attack the Panama Canal without first capturing St. Thomas. Without it they would leave a fortified base in their rear, an extremely dangerous situation for an attacking force.

THE FORT ON THE HILL ABOVE CHARLOTTE AMALIE
Now an American jail

A BAY RUM CARRIER
Island of St. John

The value of the harbor of St. Thomas and its strategic advantages have been recognized since the days of the Spanish buccaneers. Once the headquarters for ships sailing under the black flag, the memories of those days will always form a romantic and fascinating side of the life that was. Today there are modern harbor works, floating docks, marine slips and wharves provided with electric cranes, oil reservoirs, coal depots, fresh-water tanks, machine shops, and many other things that contribute to the

commercial advantage of St. Thomas as a port of call.

We must not overlook the political importance of extending American jurisdiction over islands situated in the Caribbean Sea. The possibility of a change of sovereignty of any of the islands under foreign jurisdiction is of grave concern to this country.

The Monroe Doctrine, a settled national policy, would have caused this country to look with disfavor upon the acquisition of the Danish West Indies by any other power. The treaty of cession of these islands to the United States is therefore a matter of no small moment.

A NATIVE ON THE WAY HOME FROM MARKET

"BLUEBEARD'S CASTLE," CHARLOTTE AMALIE

Previous to the purchase, Rear Admiral Casper F. Goodrich thus defined the advantages of the transfer in an interview in the New York *Times*. "Were the Danish West Indies in the possession of an enemy, what interests of ours would be menaced? Let us seek the answers to this momentous question. From them, as a base, to Charleston, our nearest important Atlantic harbor, is about 1200 miles; to Norfolk about 1300 miles—distances easily covered in three or four days by a fleet which could fight an action and return with plenty of fuel left in the bunkers. Moreover, raiding operations therefrom, could, and doubtless would, seriously interfere with, if they didn't wholly interrupt, our foreign commerce, even at remote points, such as New York, Boston and Portland. In the other direction lies Colon, a little more than one thousand miles away from St.

PUBLIC SQUARE, CHRISTIANSTED, ST. CROIX

Thomas. It is against Colon that an inimical campaign would more possibly be directed. The possession of this gateway to the Pacific would restore the conditions of the war with Spain, when the *Oregon* had to circumnavigate the whole of South America in order to join Sampson off Santiago de Cuba.

STREET IN FREDERIKSTED

"It is evident that a foreign nation endeavoring to acquire the Danish West Indies could in fact have no mere commercial or profitable colonial aim in view. There is but one harbor in the group that is especially fit for a naval base—Charlotte Amalie, on the south side of St. Thomas. By skill and care it could be made to accommodate a fleet large enough to occasion us grave concern. From a secure harbor for merchant steamers to a naval establishment and a military outpost, the path is neither hard nor long. It is wiser, however distasteful, to forestall any such manoeuver by a foreign power by buying the islands ourselves. We do not relish the idea of such a thorn in our side, such a threat to neighboring Porto Rico, to our naval station at Guantanamo (only 300 miles distant), to that at Key West (1000 miles distant), to the free navigation of the Caribbean Sea, and the Mona and Windward Passages (between Porto Rico and Haiti, Cuba and Porto Rico, respectively), or to our Gulf cities. Thus it appears, north, east, south and west, these islands are a most valuable *point d'appui* for any European government wishing to quarrel with us. It is, therefore, in the highest degree essential that we spare no effort to prevent their falling into unfriendly hands."

HOUSE WHERE ALEXANDER HAMILTON LIVED AS A BOY, FREDERIKSTED, ST. CROIX

DANISH SUGAR MILL, ST. CROIX

Transportation

Climatically the Virgin Islands offer much to attract the tourist as a winter resort.

BAY OIL STILL
From "The Virgin Islands," by Luther K. Zabriskie, G. P. Putnam's Sons, Publishers

They need first-class hotels, to be built and managed by competent Americans. There is no reason why the islands should not become popular with the tourist as soon as suitable accommodations have been provided.

Situated 1440 miles south of New York and 1025 miles from Colon, the northern entrance to the Panama Canal, the islands are ideally placed for a short sea voyage. The population in recent years has been diminishing, because of the loss of trade and the consequent falling-off of the number of ships in the harbor. At one time there were 46,000 people on the islands; in 1911, the number had dwindled to 27,000, and the present population is said to approximate this figure.

The only means of transportation on St. John is by horseback. As the island is very hilly, the roads are not suitable for vehicles. On St. Thomas there are about fifteen miles of good roads, traversed by numerous carriages and a few automobiles. St. Croix boasts one hundred miles of roads, but few of these are paved.

We include in our West Indies possessions not only some of the Virgin Islands, but Porto Rico. Porto Rico, however, is no more American today than when we first went to the island. But the Virgin Islander welcomes the United States. The circumstances attending the purchase and transfer of the islands were most auspicious, and we foresee only the happiest outcome from the relations between the natives and the United States.

LABORERS' HOMES ON A ST. CROIX PLANTATION
From "The Virgin Islands," by Luther K. Zabriskie, G. P. Putnam's Sons, Publishers

SUPPLEMENTARY READING

THE VIRGIN ISLANDS OF THE UNITED STATES OF AMERICA . . . *By Luther K. Zabriskie*
THE VIRGIN ISLANDS . . . . . *By T. H. N. de Booy and J. T. Faris*
DANISH WEST INDIES . . . . . *By W. C. Westergaard*

MAP SHOWING LOCATION OF VIRGIN ISLANDS

When Mr. E. M. Newman, who is now in Europe, returns, he will bring pictures and information that will mean a great deal to all the readers of The Mentor. Mr. Newman had intended to resume his South American series—which has been appearing in The Mentor—and was about to sail to the southern continent when he was summoned to Washington and commissioned by the United States Government to go over and make a special study of war conditions in England, France, and Italy. Mr. Newman's objective is not the trenches—there are plenty of war correspondents and battle photographers. His mission is a distinctly new and important one. He is to make a record, in pictures and text, of the living conditions of the people in war time as he observes them in the allied countries. When he returns, this material will be put at once before the public in a series of lectures, the purpose being to make clear to Americans just what war means to those that are not "out there," but are doing their bit in the home city, town, village, or farm district. Naturally, this material will have tremendous vital interest to all of us in the United States who are watching and wondering what war is going to mean in our daily lives and occupations. "I hope particularly," said Mr. Newman, "to illustrate the conservation of human power that makes possible the release of able bodied men to the war with the least disturbance to commerce. The object is to bring back to the United States a graphic presentation of what can be done and what should be done to permit us to utilize every ounce of our strength for the successful prosecution of the war."

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The Mentor will publish Mr. Newman's material in three articles, entitled "England in War Time," "France in War Time," "Italy in War Time." We expect to have these important articles ready for publication in the Fall—the dates will depend upon the time of Mr. Newman's return. On the opposite page we print some interesting information just received from him.

W. D. Moffat

EDITOR

BOOTH TARKINGTON

MAKERS OF MODERN AMERICAN FICTION

Booth Tarkington

ONE

TOWARDS the close of the last century Booth Tarkington wrote "The Gentleman from Indiana." It is *as* the Gentleman from Indiana that Mr. Tarkington has been widely known ever since. There was a time, some fifteen or twenty years ago, when every native Hoosier was supposed to have the manuscript of a "Best-Selling" novel concealed somewhere about his person. Some of the authors died, and some of them went into other occupations, and the state has managed to live the belief down But Mr. Tarkington remains the most conspicuous living figure linking Indiana with letters.

Born in Indianapolis on July 29, 1869, he studied at Phillips-Exeter, and later at Princeton. In both places he was recognized as one likely to go far. Princeton he entered as a junior, but "made" the editorial boards of both college publications, the *Tiger* and the *Lit*—his sketches for the former being rather better than his literary contributions to the latter. He wrote the play for the Triangle Club, and, at graduation, was voted the most popular and promising man in the Class of 1893. There followed, however, lean years, when the prophecies seemed unlikely of fulfillment. That was a period, when, like the John Harkless of his own story ("The Gentleman from Indiana"), he was figuratively "sitting on a rail fence in Indiana." Always a hard worker, he toiled unremittingly at invention and rewriting, only to have the manuscripts that he submitted with bright hopes come back to him with disheartening regularity. That was the story of the five or six years after 1893. His first tale to be sold was "Cherry," a whimsical romance of the country about Princeton and undergraduate life at the College of New Jersey in pre-Revolutionary days. Accepted by *Harper's*, it was not published until long after. Then, suddenly, success came. Almost simultaneously "The Gentleman from Indiana" and "Monsieur Beaucaire" appeared, the first a full-length novel of mid-western life, the second a charming little romance of eighteenth-century manners at Bath when Beau Nash reigned and a Prince of the Blood came over from France in the guise of a barber in the French Minister's train. The recognition won with those two books has widened with the years. After the "Gentleman" and "Beaucaire" came "The Two Van Revels," the germ of which had been a short tale of two thousand words written in the author's undergraduate days. As a result of a brief fling at political life Mr. Tarkington wrote the stories collected under the title "In the Arena." That was followed by "The Conquest of Canaan," the story of a discredited boy who leaves his native town under a shadow, and returns to win its reluctant admiration. The years spent about that time in Europe suggested "The Guest of Quesnay," and two shorter stories with scenes laid in Italy, "The Beautiful Lady," and "Mine Own People." The chief distinction of "The Flirt," in which the author returned to the Indiana setting of the earlier books, was the picture of the heroine's impish brother, Hedrick Madison. "The Turmoil," dealing with the evolution of one of the great mid-western cities, showed Mr. Tarkington in the full maturity of his power. After that book he struck a new and rich vein in his sketches delineating boy life, the stories dealing with Penrod Schofield and William Sylvanus Baxter having found a response in every corner of the land. Mr. Tarkington has also to his credit considerable achievement as a playwright. "The Man From Home," written in collaboration with Harry Leon Wilson, was one of the most successful plays of the American stage of recent years. Other plays from his pen are "Cameo Kirby," "Springtime," "Mister Antonio," "The Country Cousin," and "Seventeen." Calling Indianapolis his home town, Mr. Tarkington spends much of his time at Kennebunkport, Maine, and usually passes a month or two every year in Princeton, New Jersey.

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ROBERT W. CHAMBERS

Robert W. Chambers

TWO

WHAT impresses one most about Mr. Robert W. Chambers is his amazing versatility. In addition to being a popular novelist, he is an expert on rare rugs; an artist, and so well qualified a judge of fine art that he can talk intelligently to the curators and directors of museums about the old masters on exhibition there; equipped with an understanding of Chinese and Japanese antiques so that he can detect forgeries in that art; an authority on mediaeval armor; a lover of outdoors, of horses, dogs, and an ardent collector of butterflies; and, in addition, a thorough man of the world, who knows Paris and Petrograd, and many of the out-of-the-way corners of the earth. These are the qualities that come to mind readily, but the list is far from complete. The longer one knows Mr. Chambers, the more varied the knowledge he finds in him.

Out of such rich mental resources Mr. Chambers draws his material for fiction. He writes two novels a year for a large public that eagerly devours them. Mr. Chambers' life is a full and active one.

He was born in Brooklyn, New York, on May 26, 1865, and in his youth he aspired to be a painter. He studied art in Paris at Julien's Studio from 1886 to 1893, then returned to New York, and for a while contributed illustrations to the current publications. Then one day a novel, "In the Quarter," appeared with his name as author. From that time on his life was given largely to writing fiction, and the record of the years has been a brilliant one. In 1893 he published the haunting, uncanny, but fascinating "The King in Yellow," a collection of stories of art life. He turned to France first as a background for romance. At irregular intervals from 1894 to 1903 appeared "The Red Republic," "Lorraine," "Ashes of Empire," and "Maids of Paradise." They all had the France-Prussian War as their setting, and dashing young Americans as their heroes. Then in 1901 with "Cardigan" and other books he gave expression in fiction to the spirit of the American Revolution. It has not been simply as an historical or a semi-historical novelist, however, that Mr. Chambers has made his widest appeal. In the foibles, extravagances, superficialities and eccentricities of contemporary American society, he has found his richest vein. It does not matter whether the background of a particular tale be New York, or Washington, or Palm Beach. The underlying social and ethical problems are of real importance. Marriage, the giving or selling in marriage, the reasons of heredity that make for or against a certain marriage: these are fundamentals common to all humanity. In "The Younger Set" and "The Firing Line" hero and heroine have unwisely married, and the story hinges largely on problems raised subsequently by divorce. In "The Fighting Chance" (1906), and "The Danger Mark" (1909) the problem is that of unfitness to marry. In the former it is the man who inherits a craving for alcohol, and the woman for sentimental philandering; in the latter the woman is given to intemperance and the man to excessive gallantry. In one of his later books, "The Hidden Children" (1915), Mr. Chambers returns to a favorite setting of the earlier years, upper New York of the Colonial period.

On a basis of solid fact, it would seem impossible for one man to do all this work. Where does he ever find time to do it? The answer lies in the fact that Mr. Chambers keeps regular hours—office hours, almost—for his writing, all of which is done in long hand. At that he is not a rapid writer, frequent revision is essential, and a passion for the verification of details consumes much time. Yet the bulk and excellence of the accomplished performance remains an established fact; and in many ways it is little less than marvelous.

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RICHARD HARDING DAVIS

MAKERS OF MODERN AMERICAN FICTION

Richard Harding Davis

THREE

IN 1890 there appeared in *Scribner's Magazine* a short story entitled "Gallegher." It gave an account of a smart young office boy employed on one of the newspapers, who succeeded in "beating the town" by bringing home a big, sporting story to his paper. It was held at once as one of the best newspaper tales ever printed.

When the name of the author, Richard Harding Davis, was mentioned, the reading public recognized him as the son of Rebecca Harding Davis, a fiction writer of established reputation. Davis' fifty-two years of life were full of color and manly achievement. He was a novelist, short story writer, war correspondent, editor and playwright. He began as newspaper reporter, a pursuit most natural, for his father, L. Clarke Davis, was a brilliant journalist and editor.

Richard Harding Davis was born in Philadelphia in 1864, and attended the Episcopal Academy and afterwards Lehigh and Johns-Hopkins Universities. In his college days he was weak in mathematics, but strong in all that made life full, joyous and vital. He entered eagerly into sports and wrote stories for the Lehigh magazines.

In 1887 he began newspaper work on the Philadelphia *Record*, also occasionally contributing to the *Press* and other Philadelphia papers. His first big assignment was in connection with the Johnstown Flood in 1889. It was in the *Press* office that Davis discovered the original Gallegher—the office boy who was immortalized in Davis' famous story, just as the mongrel dog was vindicated in Davis' later story "The Bar Sinister." In 1889 he made a trip to London as correspondent to the Philadelphia *Telegraph*, and while there wrote of the Whitechapel murders in a way that attracted attention. He got his first job in New York in this way. In London he came to know Arthur Brisbane, who was then English correspondent of the New York *Sun*, and afterward editor of the *Evening Sun*. On his return to America he sought a newspaper job in New York, and Brisbane took him on the *Evening Sun*. His first experience was strikingly characteristic. A bunco man accosted him near the ferry. Davis gave him some marked money, then had him arrested and walked him boldly into the *Evening Sun* office, showed him up for the crook he was—and then wrote him up in the form of a news story for the paper. Aside from his regular assignments as a reporter, Davis busied himself with pictures of various types of New York life. Among these the most famous were the Van Bibber stories, in which Davis presented types of New York society. In 1891 Davis went to *Harper's Weekly* and remained there for three years as managing editor. Then he became a free lance. It was not necessary for him to "hold down a job." All magazines and book publishers were eager for his work. His first engagement as war correspondent was on the battlefields of the Greco-Turkish War. He was a prominent figure among newspaper correspondents in all the great wars that followed. He made a genuine sensation by his war letters written from Cuba during the Spanish-American War of 1898. In that war Davis formed a friendship with Theodore Roosevelt that remained firm through life.

In 1898, with the publication of "Soldiers of Fortune" in *Scribner's Magazine*, the reputation of Davis as a novelist became established, and, thereafter, the fiction that flowed from his pen found an eager and growing audience. His extensive travels enabled him to set his stories in widely varied scenes. "Soldiers of Fortune" told of revolution and political intrigue in a South American republic. That also was the vein and atmosphere of "Captain Macklin" and later of "The White Mice." In "The Exiles" he invaded Morocco for his background and characters. Later, in "The King's Jackal," he laid his scenes in Tangier. "Ranson's Folly" is a story of American army life—afterwards dramatized, as was "Soldiers of Fortune." "Princess Aline" is a romantic story of the "Graustark" kind. Besides fiction, Davis wrote many books of adventure and travel impression, such as "Rulers of the Mediterranean," "Three Gringos in Venezuela," "The West from a Car Window," "A Year from a Reporter's Note Book," "The Congo and Coasts of Africa." His later books, based on war correspondence, include "With the French," "Somewhere in France," and "With the Allies."

We have named scarcely half the titles of Davis' work. He was busy always with his pen, and, as one of his fellow craftsmen in literature observed, he "never penned a dull line." In all his stories he left a record of his sturdy Americanism and his passionate devotion to a just cause, wherever he found it.

He died suddenly of heart disease on April 12, 1916. The loss to literature was great and was keenly felt in a history-making time like this that demands an eloquent chronicler. Davis will always be remembered as one of the most buoyant, brave, heroic and industrious workers in the field of American literature, a man who saw life fully and clearly, and who reflected it truly, in healthy, ringing, inspiring tones.

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JACK LONDON

Jack London

FOUR

JACK LONDON'S stories were written largely out of his own life. If they were not actual experiences cast in fiction form, they were narratives spun out of the fiber of his own experiences. Life was never certain for London. He was always on the go, and his life was an ever vigorous, vital *present*, with the future undetermined and unguessed. He was born in San Francisco on January 12, 1876. When he was eleven years old he left his ranch in the Livermore Valley and set out to satisfy his longing for a knowledge of the world and an expression of himself. He first went to Oakland, where, in the public library, he came under the romantic influence of such fiction writers as Washington Irving, Ouida and others. Out of Irving's "Alhambra" he built castles in the air for himself, and launched upon a great literary career with a strong undercurrent of romance and an irresistible longing for adventure. He left home and joined the oyster pirates in San Francisco Bay. Then, tiring of the excitement of piracy, he turned with equal enthusiasm to the prosecution of it by joining the Fish Patrol, and was entrusted with the arrest of some who were his former comrades. Thrilling accounts of this life appeared under the title of "Tales of a Fish Patrol." In them is a wild buccaneer spirit, and the savor of the sea. Those of us that read the "Sea Wolf" can find there a passionate expression of the author's own experiences before the mast while seal hunting in Behring Sea or along the coast of Japan. It is full of strong appealing character and strange sea lore. The same wild breath of adventure is to be found in "The Mutiny of the Elsinore," in which London describes thrilling experiences in a trip around the Horn. London was a worker, and labored hard among the rougher elements of life—with longshoremen and shovellers in San Francisco; in factories and on the decks of coastwise vessels. He was as good a tramp, too, as he was a laboring man. He walked the Continent over from ocean to ocean, gathering the materials for a "vast understanding of the common man." Out of these experiences came "The Road," which is an appealing record of sympathy with the vagrant poor, and an absorbing narrative of adventurous journeying.

London tried schooling at different times in his early life, working between hours to pay for his education. After several months of stern, hard application, in which he covered about three years' preparatory work, he entered the University of California. The strain, however, of work and study combined was too much for him, and after three months he had to give up. Turning to things quite different, and with a desperate hope that he might find fresh inspiration in a new kind of life, he set off for the widely advertised Klondike to seek for gold. In the Klondike "nobody talks; everybody thinks; you get your true perspective; I got mine," he says. After a year of hard toil in the north, London returned home and assumed the burden of supporting his family, his father having died while he was away. He wrote story upon story, and finally gained acceptance and success. As book after book came out, the public grew to know and recognize Jack London as one of the strongest figures in American fiction.

He passed away on November 22, 1916, in the full swing of his intellectual vigor, and it will be long before his splendid achievement is forgotten, or the last of his books is consigned to the high shelves that spell oblivion. No matter how sparing one may be in the use of the word genius, for him it could be claimed. His name is one of the few among those of the writing men of our time with which the magic word is, without hesitation, to be linked. There was genius in his invention, in his imagery, in his nervous style. To him was given to know the moods of Arctic wastes and California valleys. The struggles of his own soul and mind and body he dissected and portrayed in "Martin Eden" (1909) and "John Barleycorn" (1913). He was practically the only American writer to invade magnificently the prize-ring as a field for romantic narrative. Its seamy side, its sordid corruption, its driftage, as well as its brutal heroism, are reflected in such tales as "The Game," "The Abysmal Brute," "The Shadow and the Flash," and "The Mexican." "The Call of the Wild" (1903) challenges the very best dog-stories of all time. "The Sea Wolf" (1904) is an epic of salt brine, and creaking rigging, and man's inhumanity to man, and the "blond masters of the world." There followed "Burning Daylight" (1910), and "The Valley of the Moon" (1913), and "The Mutiny of the Elsinore" (1914), which is "The Sea Wolf" "in a lower key," and "The Strength of the Strong" (1914), and a dozen more. Whatever the field, there was a sureness of touch, and a power of graphic description that made the man always a figure and a force.

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REX BEACH

MAKERS OF MODERN AMERICAN FICTION

Rex Beach

FIVE

IT was in Alaska—the field of "The Forerunner," the Kipling poem that was for so many years lost and entirely forgotten by its author, the field of Robert W. Service's "Songs of a Sourdough," the field of so many of the tales of Jack London and Stewart Edward White, that Rex Beach first found literary expression. He did not set out in life to be a literary man. He was a husky youth, full of vitality and, even in his teens, a giant in strength. He was born in Atwood, Michigan, September 1, 1877, and he left his native place for the city of Chicago when he was eighteen years of age. He meant to study law, but, as he said, he "had no money—therefore had to find a place to eat." In those days the athletic associations of several of the large cities maintained football teams of giant gladiators to entertain the multitude. Young Beach had seen just one game of football, but when he presented himself, his physical architecture was so imposing that he was engaged without hesitation, as tackle, by the athletic association football manager. The college teams used to play an annual series with these huge professionals. Later they gave it up, because the "truck-horse professionals" hired by the athletic associations could not be hurt by anything short of an ax, while the college players, as Beach said, were apt to "tear under the wing." Beach played through the season, taking part in the games by which his team won the championship of America. Then, being desirous of eating regularly, he attached himself to the athletic association's swimming team and broke an indoor record at water polo. That was in 1897, when the Klondike excitement broke out. He stampeded with the rest. It was the spirit of adventure and no thought of finding material for fiction that took him to the Yukon.

With two partners from Chicago, Beach was dumped off the boat at Rampart, on the Yukon, one rainy night. The three hadn't a dollar amongst them, but they had plenty of goods. Then things began to happen. "We prepared to become exorbitantly rich," in the words of Beach, "but it was a bad winter. There were fifteen hundred rough-necks in town, very little food and plenty of scurvy. I soon found that my strength was my legs. I could stampede with anybody. So I stampeded faithfully whenever I heard of a gold strike, all that winter." He became dissatisfied with his two Chicago partners, because they preferred to sit around the cabin cooking tasty messes to tearing through blizzards at the tail of a dog team. They wanted to wait for their million dollars until spring, but Beach wanted his by Christmas at the latest. And so he set off, and quickly fell under the spell of the Yukon. The glare of the white Arctic night, the toil of the long trail, the complicated struggle for existence, the reversion to primitive passions inevitable in a new civilization in process of formation, made an imperative call to him, and held him fascinated. The life about him moved him to write, and before long he was embarked on a literary career. "Pardners," his first story, appeared in 1904, and this was followed by the novel that gave him reputation—"The Spoilers," which appeared in 1906. Then came "The Barrier" in 1907, and "The Silver Horde" in 1909. They are all virile stories of Alaskan life that have stirred many thousands of readers. Some have gone into dramatic form, "The Barrier" having attained a new and distinguished success as a film picture. In "The Ne'er Do Well" and in "The Net" Beach sought Southern scenes, the former novel having Panama as its background, and "The Net" New Orleans during the Mafia days. "The Auction Block," published in 1914, deals with the favorite activities of modern Metropolitan life, and the sale of young girls into the marriage tie.

Mr. Beach was christened "Rex E. Beach," and he retained the middle initial for some time, but when correspondents who had read his books sent letters to him in which they addressed him as "*Rev.* E. Beach," he dropped the middle initial. He lives in New York City and has a summer residence at Landing, Lake Hopatcong, N. J

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STEWART EDWARD WHITE

MAKERS OF MODERN AMERICAN FICTION

Stewart Edward White

SIX

READERS often link the name of Jack London and Stewart Edward White. The men were of the same literary stature, though different from each other in almost every respect. Both found inspiration in the same theme—the struggle of man with primeval forces. In their technique we find the difference. There is a sharp contrast between the fire of Jack London and the held-in strength of Stewart Edward White. White was once asked if it was not possible to lay hold of the heart and imagination of the public through a novel which had no human love interest in it—whether man matched against nature was not, after all, the eternal drama. White considered for a moment and then said: "In the main, that is correct. Only I should say that the one great drama is that of the individual man's struggles toward perfect adjustment with his environment. According as he comes into correspondence and harmony with his environment, by that much does he succeed. That is what an environment is for. It may be financial, natural, sexual, political, and so on. The sex element is important, of course—very important. But it is not the only element by any means; nor is it necessarily an element that exercises an *instant* influence on the great drama. Anyone who so depicts it is violating the truth. Other elements of the great drama are as important—self-preservation, for example, is a very simple and even more important instinct than that of the propagation of the race. Properly presented, these other elements, being essentially vital, are of as much interest to the great public as the relation of the sexes." These words express clearly the trend of Stewart Edward White's work.

From the beginning, Mr. White's career has been one of prompt recognition and well-ordered prosperity. He was born at Grand Rapids, Michigan, on March 12, 1873. He attended no school until he was sixteen years of age, and yet, far from being behind his schoolmates, he entered the high school in the junior class with boys of his own age and graduated at eighteen, president of his class. He excelled in athletics and held the long distance running record of his school. He graduated a few years later from the Univeristy of Michigan, and then spent two years in the Columbia Law School, New York.

With private tutors, and then amidst the best university surroundings, Stewart Edward White's education was obtained under advantageous auspices. He read and traveled a great deal, and had time to indulge his love of outdoor life. His first production was a story entitled "A Man and His Dog," and under the advice of Professor Brander Matthews, of Columbia, he offered it for publication. It was bought by *Short Stories* for $15. This was Mr. White's first income from literary work. Then, after a trip to the Hudson Bay country, he wrote a story entitled "The Claim Jumpers," which was published in 1901 and met with an encouraging reception. "The Westerners," which was finished later, was bought for serial publication for about $500. This was a distinct advance in his literary affairs, and when "The Blazed Trail" was published in 1902, Mr. White came truly into his own. "The Blazed Trail" was written in a lumber camp in the depth of a western winter, and it was composed during the early hours from four A. M. till eight, before he put on his snow-shoes for a day's lumbering. "The Conjurer's House" came out in 1903, and in that same year "The Forest," which Mr. White regards as one of the most instructive books he has written. It is the story of a canoe trip. The immediate success of "The Forest" led to the writing of "The Mountains," which told the adventures of a camping trip in the Sierras. Then "The Mystery," "Camp and Trail," "The River Man," "The Rules of the Game," "The Call of the North," "The Rediscovered Country," "The Adventures of Bobby Orde," "The Gray Dawn," "The Leopard Woman," and other books followed. In all his books he told the vigorous story of life in its primitive forms. "Gold" is a picture of the madness of '49. "The Dawn" is a story of California, "The Leopard Woman" a romance of the African wilds. In his later books, Africa became to Mr. White a very real and commanding subject—and one that still holds him in its lure.

Mr. White produces his books fast and in highly finished form. He is essentially a realist. Human achievement, with all its vital interest and meaning, laid hold early on his imagination and gave to his stories their all-pervading sense of truth to life. As a critic has said, "One puts down a book by him with a feeling of having read through experiences, dramatic and full of romance, yet never breaking the bounds of probability—and that is fine art." Mr. White's home is in Santa Barbara, California, and his field of active experience includes a substantial part of the whole surface of the earth.

Mr. White entered the U. S. Service shortly after war was declared. The picture on the opposite side of this sheet shows him in uniform as Major of U. S. Field Artillery.

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HARLEKENDEN HOUSE, THE HOME OF WINSTON CHURCHILL, CORNISH, N. H.

MAKERS OF MODERN AMERICAN FICTION
(MEN)

By ARTHUR B. MAURICE

Former Editor of The Bookman, author of "New York of the Novelists"

MENTOR GRAVURES

RICHARD HARDING DAVIS · BOOTH TARKINGTON · STEWART EDWARD WHITE
JACK LONDON · ROBERT W. CHAMBERS · REX BEACH

EDITORIAL NOTE.—In this number of The Mentor the *men* that are making modern American fiction are considered. The *women* fiction writers will be considered in a later number.

NOW and again we are privileged to touch hands with some literary figure of the older generation, who was of the earth when Poe and his Virginia lived in the Fordham cottage; when Fenimore Cooper, returned from his long stay in Europe, was disputing with his neighbors on the shores of Lake Oneida, when Irving was looking down upon the noble Hudson from the slopes of his Sunnyside estate; and Holmes was babbling wise philosophy over his coffee cup at the Boston breakfast table. But there are not many of these links with the past left, and the number is diminishing rapidly. Far beyond the Biblical three-score and ten, Mr. William Dean Howells, as the dean of our literature, is a figure upholding its richest traditions; turning three-score and ten is Mr. James Lane

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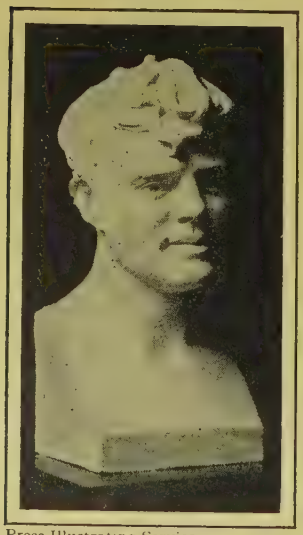
Allen, whose name recalls the rare style and the throbbing life of the books dealing with the Blue Grass region of Kentucky. They are almost the last of the surviving great literary figures of yesterday. These men and their work have been covered in Mentor Number 25, "American Novelists." The writing men of today, the men with whom this article has to do, are for the most part those that have not traveled beyond late youth or early middle age. Their hats were flung into the ring in the present century; or, at the earliest, in the nineties of the last century. Finding the field of the novelist a broader one than it was in their fathers' time, they have blithely ventured, in their search for themes and material, to the four corners of the real or the imaginary earth. The following pages present a general review of the work of our well known fiction writers of the day. The works of Owen Wister, Winston Churchill, Thomas Nelson Page and George W. Cable are also considered fully in Mentor Number 25, so we lead off this article with a simple mention of these distinguished story-writers. In Wister's work there is a primal bigness and strength and, in certain passages, great tenderness and romantic charm. Two of his best known books, "The Virginian" and "Lady Baltimore," reveal these qualities.

JAMES LANE ALLEN

From photograph, copyright by Paul Thompson, N. Y.

WINSTON CHURCHILL



Press Illustrating Service

JACK LONDON

Bust, by Finn Haakon Frolich, unveiled in Honolulu, after London had made his cruise in the *Snark*

Mr. Winston Churchill began with the somewhat trivial "The Celebrity" (1898), regarded when it appeared as a satirical hit at the personality of Richard Harding Davis. Books that followed were, "Richard Carvel," "The Crisis," "The Crossing," "A Far Country," "Coniston," "Mr. Crewe's Career," "The Inside of the Cup," "The Dwelling-Place of Light." It is to a splendid persistence, an inexhaustible patience, a rigid adherence to his own ideals both in style and substance, that Winston Churchill owes the high position among American contemporary writers of fiction that he holds and has held for nearly two decades. Thomas Nelson Page and George W. Cable attained fame long ago as interpreters, in fiction, of Southern life, Mr. Page by his tender and beautiful "Marse Chan," "Meh Lady" and other stories, Mr.

Bradley studios, N. Y.
JOHN FOX, Jr.

GEORGE BARR McCUTCHEON

Cable by his romances of "Old Creole Days" and "John March, Southerner."

Norris' Realism and McCutcheon's Romanticism

More than fifteen years have passed since Frank Norris died, yet no one has yet come to take quite his place as an apostle of American realism. Before he fell under the spell of Émile Zola, with "McTeague," and began his Trilogy of the Wheat, he had been the most ardent of romanticists. His earliest ventures in literature were tales of love and chivalry, written when he was a boy in his teens in Paris. "McTeague" was begun in the undergraduate days at the University of California. It began to assume shape in his year of student work at Harvard; but was elaborated and polished for four years before the public was allowed to see it. In the meantime "Moran of the Lady Letty" had been dashed off in an interval of relaxation, and became Norris' first published book. Then came to Norris what he considered "the big idea," that summed up at once American life and American prosperity. He would write the Trilogy of the Wheat. In the first book, "The Octopus," he told of the fields and elevators of the Far West. "The Pit" showed the wheat as the symbol of mad speculation. With "The Wolf," to picture the lives of the consumers in the Eastern States and in Europe, the Trilogy was to end. But before the tale was written Frank Norris died, at thirty-two years of age.

A few years ago, Mr. George Barr McCutcheon was asked the question, "Where is Graustark?" Whimsically he attempted to jot down on paper directions for journeying to the imaginary mountain kingdom, starting from a railway station in Indiana. Someone rather ill-naturedly suggested that Mr. McCutcheon had originally discovered this country in Anthony Hope's "The Prisoner of Zenda." But then someone else pointed out that Anthony Hope in turn had found his inspiration in Stevenson's "Prince Otto," and that R. L. S. himself had certainly owed something to the Gerolstein of M. Eugène Sue's "The Mysteries of Paris." So neither the exact whereabouts of Graustark nor its ultimate source is of great importance. What really counts is that hundreds of thousands of readers have found delight in following the adventures of Mr. McCutcheon's stately heroines and somewhat irreverent heroes.

Every one of his romantic tales has met with generous welcome—"Graustark," "Beverly of Graustark," "Truxton King" and "The Prince of Graustark."

But Graustark, if the first string to Mr. McCutcheon's bow, is far from being the only one. Quite as wide in its popular appeal as any of the Graustark tales was "Brewster's Millions," with its curious starting problem. "Nedra" dealt with

BOOTH TARKINGTON
From a late picture taken at his summer home in Maine

a desert island. "The Rose in the Ring" was the story of a circus. Other books not to be overlooked are "Jane Cable," "The Daughter of Anderson Crow," "The Man from Brodney's," and in shorter form, "The Day of the Dog," "The Purple Parasol," "Cowardice Court" and "The Alternative."

OWEN JOHNSON

John Fox and Harold McGrath

Someone recently spoke of John Fox, Jr., as a writer who never misses fire. Certainly he has staked a definite claim to the Cumberland Range and the primitive people who dwell in its valleys and along its mountainsides. As early as 1894, "A Mountain Europa" appeared. It was followed by "A Cumberland Vendetta," "Hell-for-Sartain," "The Kentuckians," "Crittendon," and "Blue Grass and Rhododendrons." But it was not until 1903, with "The Little Shepherd of Kingdom Come," that Mr. Fox came fully into his own. Incidentally, his fellow-craftsman, Mr. George Barr McCutcheon, considers the title the best title in all American fiction. The high standard established in "The Little Shepherd of Kingdom Come" has been maintained in "The Trail of the Lonesome Pine" and "The Heart of the Hills." Into that imaginary Central Europe which lies somewhere east of Dresden, west of Warsaw, and north of the Balkans, Harold McGrath went for such early books as "Arms and the Woman" and "The Puppet Crown." Those tales were in the first rank among the thousands of stories that about that time were being written about the fanciful kingdoms and principalities, and the natural gift for story spinning that the author showed then has been in evidence in his subsequent tales in other fields. From among the twenty odd books that now bear his name, it is not easy to make a selection. Perhaps those most conspicuous on the score of popularity have been "The Man on the Box," "Half a Rogue," "The Goose Girl," "The Carpet of Bagdad," and "The Voice in the Fog."

BRAND WHITLOCK

A Group of Popular Story-Tellers

While still an undergraduate, Mr. Jesse Lynch Williams wrote several of the tales that went to make up his first published volume, "Princeton Stories." In his second volume, "The Stolen Story and Other Stories," Mr. Williams struck an entirely new note. Of the tale from which the book drew its title, Richard Harding Davis, himself the author of "Gallegher," once said that it was "the very best of American yarns of newspaper life." Two others of the collection of striking ingenuity were "The Great Secretary of State Interview" and "The Cub Reporter and the King of Spain." Among Jesse Lynch Williams' later books are "The Day-Dreamer, "My Lost Duchess," and "The Married Life of the Frederick Carrolls."

THOMAS DIXON

It was along the road of anonymity that Basil King finally found the way to pronounced success. In "Griselda," "Let Not Man Put Asunder," "In the Garden of Charity," "The Steps of Honor," and "The Giant's Strength" he had won recognition as an accomplished story-teller. But still his audience was a comparatively limited one. Then, in 1910, appeared "The Inner Shrine," a story of Franco-American life. It was read from one end of the land to the other, and greatly piqued curiosity as to the authorship, which, for many months, was carefully concealed. A dozen different names were suggested and accepted before it became an open secret that the story was the work of Basil King. The success of "The Inner Shrine" was perhaps largely responsible for the success of the subsequent 'The Wild Olive" and "The Street Called Straight."

THEODORE DREISER

From photograph, copyright by Paul Thompson, N. Y.

JESSE LYNCH WILLIAMS

In by-gone years it was Brand Whitlock, the Mayor of Toledo; in recent times it has been Brand Whitlock, the American Minister to Belgium, that has obscured Brand Whitlock, novelist. Yet despite the height he has attained in the fields of politics and of diplomacy, he is, and is likely always to remain, at heart a man of letters. Some day it may be given to him to "write the book as he sees it, for the God of things as they are." Meanwhile he claims recognition here on the basis of such works of fiction as "The Thirteenth District," "The Happy Average," "The Turn of the Balance," and "The Gold Brick," a collection of short stories that appeared in 1910.

Campbell studios, N. Y.

LOUIS JOSEPH VANCE

Samuel Hopkins Adams' first essay in the field of sustained fiction was "The Mystery," written in 1905, in collaboration with Stewart Edward White. The following year appeared "The Flying Death," a tale of Montauk Point. Subsequent novels by Mr. Adams have been "Average Jones," "The Secret of Lonesome Cave," "Little Miss Grouch," and "The Clarion," the last named being a story involving newspaper life and the sinister influence of the tainted money of patent medicine advertisers on the liberty of the press.

Despite a career of literary activity that goes back twenty years, it is almost entirely to the books of the past four or five years that Rupert Hughes owes his present position as a popular novelist. In this later work, in such books as "What Will People Say?" "Empty Pockets" and "We Can't Have Everything," he has found his theme in modern Gotham: New York in the grip of the latest follies, the insensate, all-day and all-night pursuit of pleasure, the dance, the eating and drinking, and the squandering. Mr. Hughes' novels reveal a range of knowledge of even the remote corners of the great city that has been painstakingly

From photograph, copyright by Pach Brothers, N. Y.

IRVING BACHELLER

acquired, and that is used with the sense of selection of the accomplished story-teller. Only a few months beyond undergraduate life Owen Johnson published "Arrows of the Almighty" and "In the Name of Liberty." They were read by a limited audience, mildly applauded, and then forgotten. Later, showing the Balzacian influence, came "Max Fargus," dealing with the seamy side of New York law offices. In the point of material success, it could hardly be considered an improvement on the earlier books. Then, one day, in a whimsical mood, the author turned back to memories of his schoolboy years in Lawrenceville. The road that led to success and recognition had been found. From one end of the land to the other, growing boys, and boys that had grown up, and boys with gray beards laughed over every fresh exploit of "The Prodigious Hickey," and "Dink Stover," and "Doc McNooder," and "The Tennessee Shad," and "The Triumphant Egghead," and "Brian de Boru Finnegan." Motor parties traveling between New York and Philadelphia acquired the habit of breaking the journey at Lawrenceville for the purpose of visiting "The Jigger Shop," where Hungry Smeed established the Great Pancake record. Then Mr. Johnson took one of his heroes from the school to the university, and "Stover of Yale" was the most talked-of book of a month. Turning to a broader field, the author found, in the turbulent life of twentieth-century New York, the background for "The Sixty-first Second," "The Salamander," "Making Money," "The Woman Gives," and "Virtuous Wives."

Courtesy Charles Scribner's Sons
GOUVERNEUR MORRIS

It is no disparagement of Edwin Lefevre as a workman to say that one short story, written at a single sitting before breakfast, is of more permanent importance than all the rest of his production combined. For that story is "The Woman and Her Bonds," which, without any hesitation, is to be ranked among the really big short tales of American fiction. It is the first of the collection known as "Wall Street Stories," a book which brought to Mr. Lefevre quick recognition. Wall Street is the author's particular field, and many of his characters are easily recognized by those in intimate touch with the money mart of the Western world. Besides "Wall Street Stories," Mr. Lefevre has written "Samson Rock of Wall Street," "The Golden Flood," and "To the Last Penny."

From photograph by Florence M. Hendershot, Chicago
HAMLIN GARLAND

Dreiser and Dixon

A vigorous, if undeniably crude, figure in contemporary American fiction, is Theodore Dreiser. Lacking style and literary distinction, frequently bordering on the ridiculous, he nevertheless, by a rigid devotion to a certain kind of realism that omits no details, has built up a following that chooses to regard him as something of a great man. His first book, written a dozen years or more ago, was "Sister Carrie." It introduced a soiled, unsentimental, rather sordid, but pathetic and very human heroine. After a career in Chicago, Sister Carrie made her way to New York, and eventually climbed to comfortable heights of worldly suc-

Press Illustrating Service
RUPERT HUGHES AND MRS. HUGHES IN THEIR LONG ISLAND HOME

CAPT. RUPERT HUGHES

cess. "Jennie Gerhardt" (1911) was in much the same vein and manner. "The Financier" (1912) gave a picture of American business life as it was or as Mr. Dreiser conceived it to be during the Civil War and the Reconstruction Period. Whatever its merits or demerits may be, "The Genius," his latest novel, owes its chief prominence to its much debated morality.

After a life of activity in many fields, Thomas Dixon entered the writing lists with "The Leopard's Spots" (1902), in which, powerfully if somewhat unevenly, he depicted conditions in certain states of the South under the carpet-bag and negro domination of the late sixties. Following up the same phase of history, he introduced, in "The Clansman," the Kluklux Klan, and showed the work accomplished by that mysterious organization in bringing about the redemption of the afflicted district. Among Mr. Dixon's later books are "The Traitor," "The One Woman," and "The Sins of the Father."

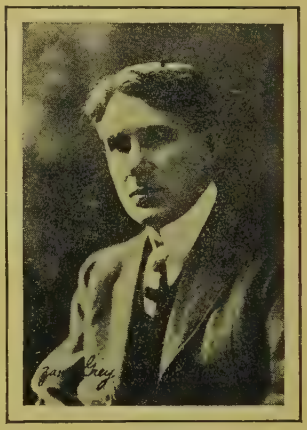
Harrison and Bacheller

Henry Sydnor Harrison's first novel, "Captivating Mary Carstairs," was published anonymously, but in 1911 "Queed" appeared under the author's own name, and at once took a place in the front rank of the year's successful novels. There was a reminiscence of Dickens in the tale. Queed, "the little doctor," as he is known to his associates in the story, is redeemed from over-acute egotism through the agency of two young women. At two years' intervals following "Queed," came "V. V.'s Eyes" and "Angela's Business."

Back in the nineties of the last century there was a corner of New York City known as Monkey Hill. It was in the shadow of the Brooklyn Bridge, and crowning it, standing far back from the street, was a kind of chalet that served as a club for certain writing men. Among these men was Irving Bacheller, and to pleasant evenings in the club may be traced "Eben Holden" (1900), the most popular of Mr. Bacheller's many popular books. As early as 1893, he had written "The Master of Silence;" "The Still House of Darrow" appeared in 1894. But it was "Eben Holden" that made the author's name for a time a household word. That book was

ERNEST POOLE

followed by "D'ri and I," "Darrel of the Blessed Isles," and "Vergilius," a tale of ancient Rome. In his later books, such as "Keeping Up With Lizzie" and "Charge It," Mr. Bacheller plays whimsically with the problems of modern extravagance. His latest novel is "The Light in the Clearing."

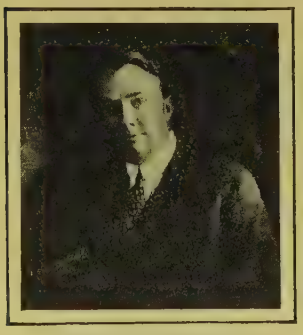


ZANE GREY

Fiction Notes in Varied Keys

If one novel can make a novelist, Ernest Poole earned the right to be considered one of the makers of modern American fiction when he wrote "The Harbor" (1915). Although the end of the story was somewhat marred by over-insistence on sociological problems, in the first part of the book the author struck a reminiscent note as charming as that struck by Du Maurier in "Peter Ibbetson." No one had paid much attention to Mr. Poole's earlier novel, "A Man's Friends," but in the general recognition of "The Harbor," as a work of far more than ephemeral significance, there was hardly a dissenting voice. Not so widely popular, but marked by the same high quality of workmanship, is Mr. Poole's later book, "His Family."

Of the same generation at Princeton as Ernest Poole was Stephen French Whitman, and as mention of Mr. Poole's name inevitably suggests "The Harbor," so the name of Mr. Whitman calls up at once memories of "Predestined." Unlike "The Harbor," "Predestined" was not, speaking materially, a success. It was too grim, its ending was too pitiless. But very few who read the story of the degeneration of Felix Piers were able soon to forget it. In such later stories as "The Isle of Life" and "Children of Hope," Mr. Whitman has forsaken New York for Italy and Sicily.



JOSEPH C. LINCOLN

It is now almost twenty years since Henry Kitchell Webster and Samuel Merwin began their writing careers in collaboration. Together they wrote "The Short Line War" (1899), "Calumet K" and "Comrade John." All these were well-told tales, and the later years, when each man has been working alone, have shown that neither one carried an undue share of the burden. Mr. Webster's books include "The Whispering Man," "A King in Khaki," "The Ghost Girl," "The Butterfly" and "The Real Adventure." Mr. Merwin's work has been unusual in the variety of its themes. Washington and the Constitution of the United States were ingredients of "The Citadel." The adventures of an American girl in China were narrated in "The Charmed Life of Miss Austen." Musical theories, the segregated district of Yokohama, and incidents in Chinese hotels went to the making of "Anthony the Absolute." "The Honey Bee" is the story of a woman whose life has been in an American department store, who makes a trip to Paris, and there falls in love with one Blink Moran, of the prize-ring.

JOSEPH LINCOLN'S HOME
Summit Avenue, Hackensack, N. J.

Fiction of Adventure

There is no questioning the force that Hamlin Garland has been in the literature of our time. He has told his story of his

HARRY LEON WILSON'S BUNGALOW IN THE OZARK MOUNTAINS, MO.

HARRY LEON WILSON

own life and literary activities in "A Son of the Middle Border" (1917), a volume that was at once accepted as one of the foremost of American literary autobiographies. In no way detracting from the quality of Mr. Garland's later work is the ventured opinion that he has never surpassed some of his earlier stories. His writing career began about 1890, when the first of the tales of "Main-Traveled Roads" struck a fresh note in fiction. Between 1895 and 1898 he wrote "Rose of Dutcher's Cooley," and, in 1902, "The Captain of the Gray Horse Troop." These, with "Main-Traveled Roads" are still probably his most popular books. In 1900 "The Eagle's Heart" appeared, and later "Hesper," "The Tyranny of the Dark," "The Long Trail," "The Shadow World" and "Cavanagh, Forest Ranger."

Writing men of our generation have begun under the magic spell of Stevenson. To Lloyd Osbourne it was given to serve his apprenticeship to R. L. S., as Maupassant served his apprenticeship to Flaubert, and, while yet an apprentice, to be accepted as a collaborator. Together the stepfather and the stepson worked out "The Wrong Box" (1889), "The Wrecker" (1892), and "The Ebb Tide" (1894). Then Stevenson passed on into Shadow Land, and some years later Osbourne began alone with "The Queen Versus Billy" and "Love the Fiddler." In the first decade of the present century the motor-car was still something of a novelty, and as such almost a virgin field for fiction. It was of its then baffling problems and incomprehensible moods that Lloyd Osbourne told in "The Motor-maniacs," "Three Speeds Forward," and "Baby Bullet." Later books are "Wild Justice," "The Adventurer," and "A Person of Some Importance."

WILL PAYNE

A certain letter of the alphabet for a time seemed to exert a cabalistic influence on Louis Joseph Vance. "The Brass Bowl" appeared in 1907. The book of the next year was "The Black Bag." In 1909 it was "The Bronze Bell." There ended the use of the double B, but in 1912, Mr. Vance wrote "The Bandbox." In the meantime had appeared "The Pool of Flame," "The Fortune Hunter," "No Man's Land," and "Cynthia-of-the-Minute." Among the books that have followed "The Bandbox" are "The Day of Days," "Joan

From photograph, copyright by Paul Thompson, N.Y.

SAMUEL MERWIN

Thursday," showing Mr. Vance at his best, "The Lone Wolf," and very recently, "The False Faces," in which the Lone Wolf returns to play a great part in the World War.

EDWIN LEFEVRE

ARTHUR TRAIN

Each Holds a Place of His Own

The Law has ever had countless stories to tell. There is hardly a tale by Arthur Train that does not, in some way, lead back to one of the offices that cluster about the Criminal Courts Building facing Centre Street, on the lower end of Manhattan Island. In that neighborhood swung the shingle of the law firm of Gottlieb & Quibble, as related in "The Confessions of Artemas Quibble." Mr. Train's first book, "McAllister and His Double" (1905), began in a Fifth Avenue club, but before a dozen pages had been finished, fate had carried McAllister to the Tombs Prison. The thrice-told tales of Pontin's Restaurant in Franklin Street, where the lawyers gather at the noon hour, went to make "The Prisoner at the Bar," "True Stories of Crime" and "Courts, Criminals and the Camorra." Like Mr. Train, William Hamilton Osborne has also achieved a place in Literature as well as Law.

There are readers who regard the very facility of Gouverneur Morris as a curse, believing that if writing to him had been harder work, his present achievement would be considerably greater. His first book, "A Bunch of Grapes," dates back to his undergraduate days at Yale. Four years later, in 1901, "Tom Beauling" appeared, to be followed the next year by "Aladdin O'Brien." "Yellow Men and White" showed what he could do in the vein of "Treasure Island." Of more enduring quality was "The Voice in the Rice." It is not surprising that many of our novelists have begun with tales of undergraduate life. "Princeton Stories" was the first book of Jesse Lynch Williams. "Harvard Episodes" of Charles M. Flandrau. Will Irwin's first fling at the game of writing was "Stanford Stories" (1910). That book was done in collaboration. Also in collaboration, this time with Gelett Burgess, the creator of "The Purple Cow," the editor of *The Lark*, and a humorist of rare whim, were written Mr. Irwin's next two books. It was a short sketch of the old San Francisco before the earthquake, called "The City That Was," that first made Will Irwin's name widely known. Of more substantial proportions were "The House of Mystery," "The Readjustment" and "Beating Back."

Of a certain genuine importance has been the work of Robert Herrick. The author, like his heroes, has been finding the threads of life's web in a rather sorry tangle, and groping for a solution of the world's real meaning. It was of problems big and vital in our American civilization that Mr. Herrick wrote in "The Memoirs of an American Citizen," "The Common Lot," "The Web of Life," "The Real World," "The Gospel of Freedom," and "Together." In "The Master of the Inn" he has achieved an exceptional short story. Also deserving of high attention is Meredith Nicholson, who began in 1903 with "The Main Chance," and achieved unusual popular success somewhat later with "The House of a Thousand Candles" and "The Port of Missing Men." Among Mr. Nicholson's more recent books are "The Lords of High Decision," "Hoosier Chronicle," "Otherwise Phyllis" and "The Siege of the Seven

ROBERT HERRICK

Suitors." For tales breathing the spirit of the West and intricate mystery stories, Zane Grey and Burton Egbert Stevenson are known respectively. Mr. Grey's best known books are "The Heritage of the Desert," "The Light of Western Stars," "The Lone Star Ranger," "The Heart of the Desert" and "The U. P. Trail." Wherever a well-told yarn of intricate mystery is appreciated, such books as Mr. Stevenson's "The Marathon Mystery," "The Destroyer" and "The Boule Cabinet" have found generous welcome. Will Payne is the author of "Jerry the Dreamer," the striking "Story of Eva," "Mr. Salt" and "The Losing Game"; Edward W. Townsend in writing of Chimmie Fadden did not forfeit the place as a novelist to which he is entitled by reason of such books as "A Daughter of the Tenements," "Days Like These" and "Lees and Leaven"; and Harry Leon Wilson, who years ago made a definite impression with "The Seeker" and "The Spenders," and who of late has been moving a continent to laughter by the dexterity with which he confronted the very British Ruggles with the complicated problems of social life in the town of Red Gap—somewhere in America.

CYRUS TOWNSEND BRADY

Moffett studios, Chicago

EMERSON HOUGH

Besides all these there are Joseph C. Lincoln and Cyrus Townsend Brady, the first one in high favor for his breezy stories of Cape Cod life and character, redolent of the salt sea air, the latter for his many entertaining tales of plain and desert; and Sewell Ford, who created the slangy but very human "Shorty McCabe" and "Torchy"; and those two pungent writers of Western episodes, Peter Kyne and Charles E. Van Loan. Emerson Hough has given us rousing tales of the Middle and Far West, of the Kentucky mountains and Alaska. Holman Day's excellent stories breathe of the Maine woods, and Roy Norton has rendered tribute to the sea. Harris Dickson, a son of Mississippi, has woven into story form some throbbing incidents of Southern history, and has depicted numerous sunny corners of every-day existence below the Mason and Dixon line. James Branch Cabell is a spinner of charming romances; some of the best have a mediæval French flavor. Harold Bell Wright is well known as the author of "Barbara Worth" and several other books whose sales have climbed into the hundreds of thousands. Richard Washburn Child is a young American who wields a vigorous pen in the portrayal of national character, and James Oppenheim, not to be confused with the Englishman, E. Phillips Oppenheim, represents vital phases of present-day city life. Joseph Hergesheimer has won a place among writers by reason of his picturesque style and original invention. A comprehensive list of American-born novelists must also include the names of Leroy Scott, Henry B. Fuller, Frank H. Spearman, Earl Derr Biggers and Arthur Reeve, all of whom have within late years produced popular successes.

MAXIMILIAN FOSTER

The roll of the makers of modern American fiction is a long one, yet none can gainsay that the average of achievement is high.

SUPPLEMENTARY READING

THE MEN WHO MAKE OUR NOVELS.
By Burton Rascoe, Literary Editor, Chicago *Tribune.*

SOME AMERICAN STORY-TELLERS.
By F. T. Cooper.

THE OPEN LETTER

As you finish the foregoing review of fiction writers, you may ask, "Why do you make no mention of one of the best known and most widely read of all our modern story-tellers—O. Henry?" We have reserved a special place for him on this page. O. Henry occupied a position of unique distinction among fiction makers, and it is only fitting that he should have a place of his own in this number of The Mentor. As there is in literature only one Edgar Poe and one Maupassant, so there is only one O. Henry—and the gamut of life's keynotes that his fingers swept was wider than that of Poe and Maupassant combined. Tragedy, Comedy Mystery, Adventure, Romance and Humor—he knew them all, and it was with no uncertain, amateur touch, but with the strong, sure stroke of a master that he played in those varied keys. His Tragedy is grim, his Comedy light and skilful, his Mystery baffling, his Adventure absorbing, his Romance charming, and his Humor irresistible.

O. HENRY
(William Sydney Porter—from the latest photograph made of him)

★ ★ ★

William Sydney Porter—for that was O. Henry's real name—was born at Greensboro, North Carolina, in 1867. His father was a doctor of ability, and something of an inventive genius. His mother wrote poetry, and her father was, at one time, a newspaper editor. There was nothing unusual about this family outfit—it was quite ordinary, in fact, and in no way explained the genius of O. Henry. Nor did his school days, nor his term of employment as a clerk in a drug store. His boyhood was like that of thousands. But, as we read of him: "In those days Sunday was a day of rest, and Porter and a friend would spend the long afternoons out on some sunny hillside sheltered from the wind by the thick brown broom sedge, lying on their backs gazing up into the blue sky dreaming, planning, talking or turning to their books and reading. He was an ardent lover of God's great out-of-doors, a dreamer, a thinker and a constant reader."

★ ★ ★

At eighteen years of age he went to Texas and, as he put it, "ran wild on the prairies." If he had any ambitions to write at that time, he did not show them. He lived in an atmosphere of adventure, and he loved to tell stories, but apparently just for the pleasure of it. He was a good singer, a clever mimic, and something of a sketch artist. But his pen had not yet begun to flow. From the Texas ranch he went to Austin, where he engaged in newspaper work. After that came a period of wandering—and then the New York life. He lived in two big rooms on quiet Irving Place, three doors from Washington Irving's old home—and he found it lonesome. So he became a wanderer in New York, and he saw and noted many things in the life of that city that no other writer had taken account of. New York is better known to the world since O. Henry lived there. His stories were written under pressure and with great rapidity. He contracted to furnish the New York *World* one story a week for a year, and his product was so good that the contract was renewed. During the same period he was contributing to magazines. His total of stories amounts to two hundred and fifty-one, and they were written during eight years. Then, in 1910, he died, leaving the world enriched by a heritage of short stories that stand high among the classic productions of their kind.

W. D. Moffat

EDITOR

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THE MISSISSIPPI RIVER

Original Chronicles of Discovery and Exploration on the Mississippi

ONE

AT Evora, Portugal, in 1557, was published a narrative of "the toils and hardships that attended Don Hernando De Soto, Governor of Florida, in the conquest of that country." An anonymous Gentleman of Elvas, a member of the expedition, was the chronicler. He tells us that De Soto, son of an obscure Spanish nobleman, was born in a half-ruined castle near the ancient city of Badajoz, about the year 1500. At the age of thirty-one he sailed with Pizzaro for Peru. Returning to Seville, possessed of fame and fortune, he was appointed governor of Cuba and adelantado of Florida, a country already reported "the richest in the world." On an April day of the year 1538, De Soto embarked with six hundred Spanish and Portuguese adventurers. The fleet, comprising seven vessels, arrived at Santiago de Cuba, then at Havana, and finally, in May, 1539, crossed to Florida. For weary months De Soto and his high-hearted band braved the perils of the vast territory which then bore that name. Journeying toward the west, they came at last to a river whose width was "near half a league: a man standing on the shore could not be told if he were a man or something else, from the other side," relates our Gentleman of Elvas. "The stream was swift and very deep; the waters, always flowing turbidly, brought along from above many trees and much timber."

The Rio Grande (Great River), as De Soto called it, was crossed at a point about thirty miles below the site of Memphis, Tennessee. Pushing south through swamps, weak for want of maize, and often at arms with the savages, De Soto "sank into a deep despondency," and on May 21, 1542, "the magnanimous, the virtuous, the intrepid captain" died in an Indian village near the mouth of the Arkansas River. His body was wound in mantles, transported by canoe to the middle of the river, and cast overboard to find its last bed.

De Soto's followers, now less than three hundred and fifty strong, chose a new leader, laboriously built brigantines, and during the summer of 1543 sailed down the Great River to the Gulf, and thence to Tampico, on the Mexican coast.

JOLIET AND MARQUETTE

In the name of Louis XIV of France, Louis Joliet, a native Canadian, was elected to undertake the discovery of the upper Mississippi. With him, in May, 1673, went Father Jacques Marquette, who for a long time had wished "to obtain from God the grace of being able to visit the nations who dwell along the Mississippi River." Both Joliet and Marquette kept records of their journey; Joliet's was lost, but the narrative of the sainted Marquette has been preserved for our reading. A party of seven embarked in two canoes from a mission on the Straits of Mackinac. "The joy that we felt at being selected for this expedition animated our courage, and rendered the labor of paddling from morning to night agreeable to us," avows Marquette. They navigated Lake Huron and the Illinois River, and entered the Wisconsin, which they knew discharged into the Mississippi. The latter was reached on June 17th. The little company proceeded down-stream—parleying with Indians, recording strange animals and plants—until they were but two or three days' travel from the Mexican Gulf. There they turned back, since by that time they had determined to their satisfaction that the Mississippi flowed into "the Southern Sea," and not into the Atlantic or the Pacific.

ROBERT CAVALIER DE LA SALLE

Of several existing accounts relating to La Salle's explorations on the Mississippi, the Memoir of Henri de Tonty, La Salle's indefatigable aide, is the most valued. Sailing from Rochelle, France, July, 1678, the company arrived at Quebec two months later. In canoe and bark they made their way up the St. Lawrence and across the Great Lakes toward "the Mississippy, a river that runs not less than eight hundred leagues to the sea without rapids." Undaunted by the savagery of the Indians and the desertion of their own men, La Salle and Tonty finally entered the Mississippi from the Illinois River, in the winter of 1682. They directed their route southward, and explored the Mississippi as far as the mouth. On the coast of Texas, La Salle was brutally murdered by two disgruntled followers. "Such was the end of one of the greatest men of this age," declares Tonty, "a man of admirable spirit, and capable of undertaking all sorts of explorations."

PREPARED BY THE EDITORIAL STAFF OF THE MENTOR ASSOCIATION
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ST. PAUL

THE MISSISSIPPI RIVER

Transportation, Past and Present

TWO

THE canoe, which was often built large enough to carry a considerable cargo of freight, the pirogue, or dug-out, driven by oars, the mackinaw boat, the keel-boat, the horse-boat, and the "broadhorn," or produce boat, were the primitive means or transport on the Mississippi and its tributaries. Barges carrying up to one hundred tons of freight descended the river with the current, and were propelled upstream by poles, animal power, and warping or "bush-whacking" (pulling on ropes tied to bushes on the banks). Audubon, one of the first travelers on the river, relates that a barge leaving New Orleans frequently consumed four months in reaching Louisville, on the Ohio. Going downstream, the trip from Pittsburgh, Pennsylvania, to New Orleans occupied about a month. But it was "pole and warp, and tow and row, and row and tow, and pole and warp" for months before a cargo from New Orleans reached upper Mississippi points.

A sort of covered flat-boat, called an ark, was employed in passenger traffic when immigrants invaded the Mississippi Valley. On tributaries of the main river, sailing vessels of shallow draft, but sometimes of four hundred tons burden, were built for sea-going traffic. These were also exclusively down-stream carriers. Says the author of a Government pamphlet, "The difficulties of navigation at that time can hardly be overestimated. Aside from the risks of hostile attack and the difficulties of up-stream propulsion, and aside also from the dangers of snags and bars which have likewise attended the later history of river navigation, there were difficulties of guiding the rude and unwieldy craft around the many islands and numerous sharp bends. Floating ice often made the winter trip dangerous. Head winds were another frequent source of trouble. The river was so crooked that a favorable wind might within an hour become an unfavorable one, and these contrary winds contending with a strong current were not unlikely to drive the boat ashore."

In September, 1811, the first steamboat to ply Western waters, the *New Orleans*, left Pittsburgh for New Orleans, with the builder and his wife, Mr. and Mrs. Nicholas Roosevelt of New York, as passengers. The strange vessel, "propelled by a power undiscoverable," stopped on the way to receive congratulations, and once retraced its path up-stream for the purpose of demonstrating to an incredulous public its power to accomplish the feat. Through much experimenting there was evolved a type of steamboat especially adapted to cope with the peculiarities of Mississippi River navigation—a boat "broad and flat, capable of carrying 1000 tons when drawing only four feet of water."

In 1817 a regular service was established between Louisville and New Orleans by the *Washington*, commanded by Captain Shreve of early fame, and six years later the *Virginia* inaugurated steam traffic on the upper Mississippi. New Orleans and St. Louis became the greatest steamboat ports in the world. Several of the craft used on the Mississippi, including the *New Orleans*, were constructed according to plans furnished by Robert Fulton.

Appalling accidents occurred on the river and tributary streams. The *Mechanic*, chartered at Nashville, Tennessee, to convey General Lafayette and his suite to Marietta, Ohio, via the Ohio River, struck a snag in the night, and during the subsequent confusion Lafayette was thrown into the river and nearly drowned. Besides all his clothing, he lost $8000 in money. Three hundred vessels are recorded as having been sunk or damaged by explosions, due to excessive steam pressure and defective boilers. River trips in the middle years of the nineteenth century were frequently enlivened by races between rival captains, which sometimes resulted in disastrous collisions, sinkings, and conflagrations. In 1815, the steamer *Enterprise* made the run from New Orleans to Louisville, 1486 miles, in twenty-five days. In 1853, the *A. S. Shotwell* reduced the time to four days and ten hours. The *J. M. White* ran in 1844 from New Orleans to St. Louis, 1200 miles, in four days. In June, 1870, occurred the famous contest between the rivals, *Robert E. Lee* and *Natchez*, "the greatest steamboat race ever run. The whole country watched the race with breathless interest, and the time of passing was cabled to Europe. Fifty thousand people welcomed the *Lee* at St. Louis on her arrival from New Orleans in three days, eighteen hours,—six hours ahead of the *Natchez*. More than $1,000,000 was said to have changed hands."

Gone today are the palatial steamers whose progress up and down river held the chief interest of the populace, and presented a unique phase of life, often amid thrilling circumstances. Passenger traffic is maintained by various lines that ply sections of the river between St. Paul and New Orleans, but the railroad has for the most part superseded the side-wheeler, and an age of romance has passed.

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MISSISSIPPI RIVER LANDING AT NEW ORLEANS, LA.

THE MISSISSIPPI RIVER

The River as a Trade Route

THREE

THE history of the Mississippi River as a highway of commerce shows a period of rise, a period of maximum importance, and one of decline. During the middle of the last century the traffic along the river increased rapidly. No competitor to the river as a path of travel and transportation between the interior and the Gulf seaboard existed. A railroad to New Orleans, constructed about the year 1865, opened another route to the Gulf, and turned some of the products of transportation from the old river route. The manner of shipment by steamboats was uncertain, and it was also laborious. About this time barge lines began to be organized, and the shipment of grain in bulk was made possible. Nevertheless, the shallow water in the distributaries (delta) of the river was detrimental to the Mississippi as a highway for grain. In 1879, Captain Eads, by means of the jetties in the South Pass, secured a deep-water channel that allowed the passage of vessels of 26-foot draft. A very large increase in the total number of bushels of grain exported by the river in the two or three years following 1879 is recorded. But in after years, according to the report from which the foregoing is quoted, there was a persistent decline in the river trade, due to the competition of railroads and the shifting, tortuous character of Mississippi River channels. Though the river will always be a factor in the commerce of the valley, it is unlikely that it will ever again attain paramount importance.

Lumber, coal, grain, and cotton form the chief exports of the Mississippi Valley. Today the great bulk of these products is conveyed to disbursing points by rail, though cotton-boats loaded with bales piled as high as the pilot-house are still characteristic sights on the lower river, and the modern steel barge is used to transport coal. Besides unfavorable conditions at the estuary, below New Orleans, the presence of snags, ice, floods and low water have hindered the development of river commerce. There are no longer any through freight or passenger boats on the route between St. Louis and New Orleans. From a navigation standpoint, however, conditions are now superior to those that prevailed in the period of the river's prosperity.

With the coming of white men to the lower valley, levees, or dikes of earthwork, were raised to protect the bottom-lands from overflow. Owners of estates that fronted the river built the levees and repaired them, each giving the use of a proportionate number of slaves. As the population increased, state swamp commissioners and engineers took the work in charge. At the present time the Federal Government is expending large sums to strengthen crumbling banks, and compel the whimsical giant to keep to stipulated channels, instead of dodging hither and yon, piling up islands over-night, transferring farms to opposite states, and generally playing havoc with agriculture and navigation. Because the river is continually changing its course, and the Missouri makes the lower Mississippi its dumping ground, continual dredging is necessary. In the spring of each year the flood menace is serious. "A flood of the Mississippi is really a series of disasters, starting up the Missouri or Ohio, but reaching maximum proportions at the junction city of Cairo, Illinois. From there the great tide passes on down a thousand miles of winding river, bringing disaster in turn to one community after another, during a period of a month or even six weeks of uninterrupted peril." At such times army engineers battle against the river forces, attempting to hold old levees against the invader, or building new ones under stress. The river front is divided into levee districts to maintain the ramparts in "peace times," and defend these rich lands when "like a living, hating creature the river charges everything in its path, sullen, implacable, irresistible." The flood of 1912 is said to have caused losses amounting to $80,000,000.

Nearly two thousand miles of fortifications exist on both banks between Cape Girardeau, Missouri, and "the Passes" at the outlet. Every year the Mississippi contributes to the Gulf of Mexico over 400,000,000 tons of silt and sand. Various theories have been advanced as to the best way to correct the disconcerting habits of the Mississippi. The Outlet Theory, the Reservoir Theory, and the "Levees Only" Theory are the three most warmly advocated. The whole problem of the Mississippi is defined by a writer in *World's Work* as "The effort of one waterway to carry the drainage of half a continent, from the Alleghenies to the Rockies, and from Canada to the Gulf."

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GUN AND MORTAR BOATS ON THE MISSISSIPPI—BOMBARDMENT OF ISLAND NUMBER TEN—CIVIL WAR

THE MISSISSIPPI RIVER

The Mississippi in the Civil War

FOUR

AT the junction of four states,—Missouri, Kentucky, Tennessee and Arkansas,—in a great loop of the Mississippi, stands the town of New Madrid, and the island known to history as Number Ten. In the spring of 1862, armed with 130 pieces of artillery, this island closed the river to ships coming down from the mouth of the Ohio. Garrisoned by 7000 Confederates, it was believed Union gunboats could not pass it. Accordingly, engineers attached to General Pope's army of 20,000 Union men constructed a canal through a submerged peninsula by cutting down trees close to the ground. Pope was thus enabled to cross to New Madrid out of fire of the guns on Island Number Ten. To silence the Confederate batteries so Pope could convey his troops to the opposite bank below Point Pleasant, the gunboat *Carondelet*, protected by planks, chains, coils of rope and a barge loaded with hay, ran the blockade under fire on the night of April 4th, and two or three days later battered the guns on the eastern shore as far as Tiptonville. The Federal troops reached the other side of the river without the loss of a single man.

By the capture of Island Number Ten, the Mississippi was opened to the Federal forces as far as Fort Pillow. "It will be observed," says John Fiske in his book, "The Mississippi Valley in the Civil War," "that the decisive blow was struck by the *Carondelet*. Without the gunboats the operation could not have succeeded. The same was true, in the main, of Grant's movement against Forts Henry and Donelson, which opened a vast stretch of country to an invasion in which the river fleet was an indispensable instrument. The great rivers which flow in all directions through the heart of the continent, sustaining on their broad waters the movements of fleets, thus early impressed upon this American war a novel and interesting feature, to which there is no parallel in European history. The rivers afforded lines of operation in many respects more secure than the railways, since they could not be cut, and here the immense superiority of the Northern States in ships and machinery came early in the struggle to turn the scale slowly but surely against the Confederacy. These formidable gunboats were like floating fortresses which could be moved in two or three hours longer distances than an army could march in a day; and while it was but seldom that they could capture fortified places without the aid of a land force, at the same time this combination of strength with speed made them an auxiliary without which the greater operations of the war could hardly have been undertaken. Large steamers of 2000 tons burden, swift little river and harbor tugs, Fulton ferry-boats casemated in iron and armed with formidable guns, tall Mississippi steamboats, squat motor-boats, turtle-shaped rams with powerful engines and deadly beaks, went to make up an immense fleet of such nondescript appearance as would have aroused the skeptical wonder of a Nelson, but well-fitted, in the hands of sagacious and daring men, for the varied and difficult work which it had to perform."

"The Mississippi," said Lincoln in 1861, "is the backbone of the Rebellion; it is the key to the whole situation." Farragut's capture of New Orleans and the fall of Vicksburg justified this statement.

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SUNSET ON THE UPPER MISSISSIPPI RIVER

THE MISSISSIPPI RIVER

Down the Mississippi by Steamer

FIVE

FOR steamers of large class the Mississippi is navigable for two thousand miles. The principal river cities are St. Paul, Minneapolis, St. Louis, Memphis and New Orleans. St. Paul is commandingly situated on a bluff above the river, which is here a quarter of a mile wide. The first chapel on the site of the future city was erected in 1840 and called St. Paul's. The state capitol is notable for its architecture and for some fine frescoes depicting historic incidents. Minneapolis, on the opposite bank from St. Paul, surrounds St. Anthony's Falls, which furnish motive power for immense flour and lumber mills. The Falls of Minnehaha, with a perpendicular drop of forty feet, descend to the Mississippi from the west bank, near Minneapolis.

Between the Twin Cities and Winona, Wisconsin, the river widens for thirty miles into charming Lake Pepin. As far as La Crosse and Dubuque the splendid stream is bordered by castellated bluffs, one hundred to six hundred feet high, and the broad channel is beautified by a labyrinth of green islands. About Prairie du Chien, one of the oldest of the French trading-posts, are seen imposing Indian mounds of great antiquity. Near the mouth of the Wisconsin River a statue erected in 1910 reminds us of the heroic journey of Joliet and Father Marquette. In 1832, Black Hawk and his warriors engaged the troops of the United States on these banks, and the famous old chief was taken captive to Rock Island. Three future presidents served in this campaign: Zachary Taylor, Jefferson Davis and Abraham Lincoln.

Many cities and towns of interesting associations attract tourists during the river trip. St. Louis is the center of Mississippi and Missouri Valley commerce. Three flags have flown above the site of the mid-west metropolis—the French, the Spanish and the American. St. Louis, named for King Louis XIV of France, is especially proud of her great bridges, her public buildings and her parks.

South of St. Louis, the banks of the river lessen in height and scenic charm. Characteristics of the lower Mississippi are increasingly evident. Sandy flats swarm with wild fowl. Shanty-boats drift lazily down-stream bearing a migratory population. Due to the shelving character of the soil there are no docks, but swinging gangplanks are lowered from the bow of the steamer to the bank. Passengers are frequently entertained by the songs and antics of the black roustabouts that load and unload cargo at wayside stops. At Cairo (Kei-ro) the Ohio River comes in, bringing craft from Pittsburgh, Cincinnati and Louisville. Belmont, Madrid, Hickman, Fort Pillow, Memphis, recall the names of Grant, Sherman, Logan, Eads, Johnston, Bragg, Pemberton, Forrest—all of whom fought valiantly on the river of battles for the principles they held sacred.

Memphis stands first among the world's inland cotton markets. The levee, bordered by huge "cotton-boats," and alive with mule carts and dusky laborers, is a center of interest for strangers. The Memphis Bridge, built at a cost of $3,500,000, is the only one crossing the Mississippi south of Cairo.

On either side of the river extend fields that are busy with cotton pickers in the fall and early winter. These realistic pictures of the sunny South are a constant source of delight to travelers, who have opportunity to leave the boat at dozens of landings.

Vicksburg, which so heroically resisted bombardment by the Union gunboats in the spring of 1862, only to be besieged and eventually captured by Grant over a year later, has an attractive site near the outlet of the Yazoo River. In the terraced cemetery lie thousands of soldier dead. Many graves are marked by noble monuments, and the battlefield has its memorials, too.

Below quaint Natchez and Baton Rouge, acres of sugar plantations come into view. French and Creole villages dot the low shore. Often the inhabitants speak no English. Life runs here in a channel apart, and odd foreign customs prevail. Sweeping to the east, the river, nearing its delta, makes a crescent setting for a city of history and romance, a care-free city of festival and adventure, of balconied streets and old-world quarters, of modern industry and lively commerce—New Orleans.

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SIX

JOURNEYING to the kingdom of the West-Wind, Hiawatha "crossed the mighty Mississippi," and when he had given battle to his Father, Mudjekeewis, returned to the banks of the great river, paused at the tent of the Arrow-maker,

"Where the Falls of Minnehaha
Flash and gleam among the oak-trees,
Laugh and leap into the valley,"

and saw for the first time the dark-eyed maid who was to be the "starlight, moonlight, firelight, sunlight" of his people.

Longfellow's epic of Indian life, completed in 1855, was one of the first contributions to American letters that mentioned the Mississippi. Twenty years later our literature was enriched by Mark Twain's "Life on the Mississippi." Not only is this an inimitable chronicle of events on one of America's most picturesque water-courses, but it is notable for having contained between its covers the first record of Huck Finn's escapades, a chapter which Huck's biographer threw in "by way of illustrating keelboat talk and manners."

"When I was a boy," confesses Mark Twain, "there was but one permanent ambition among my comrades in our village (Hannibal, Mo.) on the west bank of the Mississippi River. That was to be a steamboatman." After months of day-dreaming, the youth who later in life was to make the world laugh ran away, saying he would never return home again "till he was a pilot and could come in glory." Eventually he became a cub-pilot and experienced the perplexing lessons (or some of them) narrated in this "most vivacious of his autobiographies." Incidentally he acquired a pen name for use in after years. "Twain" was the river term for two fathoms. "M-a-r-k three! Quarter—less—three! Half twain! Quarter twain! M-a-r-k twain! Quarter—less . . ." ran the cries of the leadsmen. Young Clemens felt the loneliness of the "solemn, stupendous flood. League after league, and still league after league, it pours its chocolate tide along, between the solid forest walls, its almost untenanted shores . . . and so the day goes, the night comes, and again the day—majestic, unchanging sameness of serenity, repose, tranquillity, lethargy, vacancy—symbol of eternity, realization of the heaven pictured by priest and prophet, and longed-for by the good and thoughtless!" Concerning the scenery between La Crosse, Wisconsin, and St. Paul, he reflects the enthusiasm of an old settler: "There's Trempeleau Island—a gigantic mountain full of Indian traditions, and used to be full of rattlesnakes. And above Winona you'll have lovely prairies; and then come the Thousand Islands, too beautiful for anything. Green? It's like a thousand plush cushions afloat on a looking-glass; and then the monstrous bluffs—ragged, rugged, dark-complected, just the frame that's wanted."

A shabby street in Hannibal still boasts the house the humorist lived in—"a stumpy, two-story, clapboarded dwelling close to the sidewalk," according to a recent visitor. Huckleberry Finn, whose real name was Tom Blankenshipp, lived on the next street, we are told. "The hill where the boys used to dig for treasure was two miles north of the town up the 'river road.' The most notable of the Tom Sawyer adventures occurred in a cave three miles beyond the town in the other direction." The author was born at Florida, Missouri, about twenty-five miles back from the river.

A widely known rhymed tale of the Mississippi is about a river pilot, "a man that died for men." George Eliot called "Jim Bludso," by John Hay, "one of the finest gems in the English language."

Winston Churchill laid "The Crisis" in St. Louis, to which city came Eliphalet Hopper from far Massachusetts, a friendless boy, who looked "with something of a nameless disquiet on the chocolate waters of the Mississippi." George Cable relates in "The Cavalier" the exploits of Farragut on the river. Charles Egbert Craddock, Emerson Hough and Harris Dickson have also given us romances of historic days on the Mississippi, and Hamlin Garland in his "Main-Travelled Roads" reflects the life of dwellers near the shores of the upper river. Most colorful of all the river pictures are those by Lafcadio Hearn, who in "The Legend of L'Île Dernière" (Lost Island) describes the 100-mile journey south from New Orleans to the Islands, "through a strange land into a strange sea . . . the woods dwindle away behind you into thin bluish lines;—land and water alike take more luminous color;—bayous open into broad passes;—lakes link themselves with sea-bays;—and the ocean-wind bursts upon you,—keen, cool, and full of light."

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THE STORY OF THE MISSISSIPPI

By Professor ALBERT BUSHNELL HART, *Harvard University*

MENTOR GRAVURES

LA SALLE TAKING POSSESSION OF LOUISIANA

TWO TYPES OF MISSISSIPPI STEAMER

MISSISSIPPI BOAT-LANDING AT NEW ORLEANS

DE SOTO DISCOVERING THE MISSISSIPPI (1541)
From the original painting by W. H. Powell, in the Capitol, Washington, D. C.

MENTOR GRAVURES

GUN AND MORTAR BOATS ON THE MISSISSIPPI

SUNSET ON THE UPPER MISSISSIPPI

MINNEHAHA FALLS, NEAR MINNEAPOLIS

FUTURE generations will look back on these last four centuries as the glorious time of discovery. East and west the world was still young when Columbus and Da Gama and Cabot and all the rest went careering around the globe picking up continents and charting new seas. Not till the twentieth century were the geographical mysteries of the Arctic and Antarctic solved. Only a few months ago a bold American explorer first opened up a river a thousand miles long in South America, which now bears the name of Rio Teodoro. Till very recently any energetic boy that pored over maps and read travels might look forward to becoming a sailor and finding a new island, or an explorer who should climb the highest mountain on a continent.

The exploration of new rivers has always been especially fascinating, for most of them have been reached by following them up from their mouths into unknown wildernesses. In 1865, the upper Congo River was still an enigma; in 1792, the Columbia was discovered; and in 1670 the upper Mississippi was waiting for the bark of the first European. Of all the rivers on earth none has a more romantic setting than the magnificent Mississippi. From its farthest source to its most extended delta it is longer than any river in the world; in its volume of waters it is surpassed only by the Amazon; in the number of people that live in its basin it yields only to the Danube, the Ganges, and the Chinese rivers. From

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FOUNTAIN CITY, WISCONSIN
A picturesque town on the river

its highest spring in Red Rock Lake, west of Yellowstone Park, to the Gulf of Mexico, it extends 4,221 miles; from the official source in northern Minnesota it runs 2,466 miles; from the farthest head-waters of the Allegheny River the flow is 2,374 miles. All these branches unite in the main stream below Cairo, Illinois. A big, tumbling, swirling stream is the Mississippi, with its four great tributaries, the Missouri, the Ohio, the Arkansas, the Red, and their far-reaching branches. The basin of the Mississippi spreads eastward and westward like the wings of an eagle. Eastward it includes Lake Chautauqua, which is but seven miles from Lake Erie; westward, the sources of the Marias River, on the northwestern continental divide; southward it narrows till the delta stretches into the Gulf like the talons of a bird. In this majestic basin dwell thirty-seven millions of prosperous and happy people. It includes every variety of shore, from the shallowing coasts of the Gulf and the floodlands of the lower river to the upland recesses of the Allegheny Mountains, the wide divide on the borders of the Saskatchewan, the 14,000-foot peaks of the Rockies, and the desolate plains of the upper Red River valley.

HOW SAWMILLS GET LOGS FROM THE RIVER

The River of Four Flags

Through the midst of this splendid domain, the cradle of a mighty race, flows the stream named by the Indians on its upper course, Mississippi; that name was carried down to the sea by early voyagers. Let sticklers for precision urge that the longest branch of the river is the true Mississippi; Americans refuse to look upon the

tawny Missouri, meandering from the far Rockies, as the river of fame and romance, the great national river. Our Mississippi of song and story has been a boundary between nations, the western limit of the United States, a theater of big war, and the main artery of a vast commerce.

BLUFF ON THE UPPER MISSISSIPPI

Where does the recorded history of the great river begin? Although the Spaniards, twenty-seven years after the first discovery of the islands of America by Columbus, followed the Gulf coast and are said to have seen the delta, which is the most startling thing on that coast, yet De Soto, in 1541, was the first European to reach the course of the main river; and his imagination did not stretch northward to the forest-clad lakes of Canada. The French discoverers struck the river in its upper course, and slowly tracked it downward to the sea. While the New Englanders and the Dutch were content to explore the upper Connecticut and Mohawk, French fur traders were conquering the northwestern wilderness and edging closer and closer to that mysterious stream, far in the interior, about which the Indians chattered. Fearless of wilderness, Indians and wild beasts, what a long procession of stalwart Frenchmen took part in opening up the Mississippi —Champlain, Nicolet, Radisson and Groseillers, who possibly touched the river waters; then the trader Joliet and the missionary Marquette, who started out to "discover the Great Sea and the river called the Mississippi."

MISSISSIPPI RIVER NEAR LYNXVILLE, WISCONSIN
Showing a pearl fisher at work

June 17, 1673, they reached it, and far down they paddled, past the muddy mouth of the Missouri, past the clearer Ohio.

HISTORIC OLD FORT SNELLING (1820)
At the junction of the Minnesota and Mississippi Rivers

Later there appeared on the scene the intrepid La Salle, prince of Western explorers and authentic discoverer of the main Mississippi—daunted by no shipwreck, discouraged by no losses, held back by no danger. What a day for La Salle, when, February 6, 1682, he emerged from the Illinois and pushed his craft southward! Two months later he reached the sea, proving forever that the great river emptied into Atlantic waters. He named all the land drained by the river Louisiana for Louis XIV, called "the Great." The French speedily adopted the Mississippi and its eastern branches, found portages all the way along Lake Erie and Lake Michigan, and across from Lake Superior to the upper river. They made the Mississippi the water street of their interior colony, and began also to explore the Missouri.

RIVER BOAT, "MARK TWAIN"
At St. Louis, Missouri

The English, in the great international war that began between Major George Washington and a handful of French troops in 1754, attacked the rim of the basin, but they aimed eventually at the main river, and the peace of 1762 left them possessors of its whole eastern bank. Lazy Spain was allowed to come into the possession of the west bank, thus stretching her empire from the frozen north through two continents to Chile. The Spaniards made New Orleans the capital of their province of Louisiana.

It was a short-lived possession, for a new nation, which called itself the United States of America, laid hold of the eastern part of the valley in 1783, at once found the Spanish control of the mouth of the river hugely inconvenient, and in 1803, taking advantage of a sudden change of mind on the

part of Napoleon, secured the whole western expanse, thus doubling the territory of the new republic, and preparing the road to the Pacific.

A Portrait of the River

Let us come nearer to the majestic stream, every square mile of whose watershed area has for a hundred and fifteen years lain within the broad expanse of the United States. By what names has it been called? By the Spaniards "Rio Grande," "Escondido," possibly "Espiritu Santo"; "St. Louis" and "Conception" and "Colbert," various Frenchmen called it; but the English, the Americans, and the Indians themselves applied a name to the upper river which has come to be the name of the river all the way down,—first, "Meche Sebe," "Mesche Cebe," "Messipi," now Mississippi, —"Big Water," or, more poetically, "Father of Waters." Actually, the main river is the Missouri, which is a thousand miles longer and brings down far more water than the eastern branch. The Missouri, however, comes late into the story of the West, is a boisterous, misbehaving stream which never properly washes its face, and possesses few of the incidents of romance and history that poetize the real, familiar, beloved Mississippi.

TYPICAL MISSISSIPPI LANDING
The gang-plank is swung out from the bow of the boat

The source of every river is normally found by following up the main stream to the most distant flowing water. The Mississippi, however, was a shy stream that concealed its head in forests and rapids and contorted lakes. William Morrison, in 1804, penetrated the "Lac-la-Biche"; two years later Zebulon Pike, sent out by the United States Government to find the source, got only to Red Cedar Lake, forty miles farther down, and declared that "this Lake may be called the upper source of the Mississippi River."

RIVER STEAMER LOADED WITH BALED COTTON

General Cass, in 1820, reached no further.

VIEW OF THE MISSISSIPPI
Near De Soto, Wisconsin

Schoolcraft, in 1832, worked his way up to Lac-la-Biche, which he named "Itasca," a curious contraction of the Latin words *ver* (*itas ca*) *put*, which, ungrammatically translated, mean "True Source." Nicolet, in 1836, noticed a creek flowing into the lake which he considered to be the "Cradled Hercules"; Chambers, in 1872, found another little lake farther back, which he called Elk Lake; finally, in 1891, Brower pushed still farther through the wooded swamps and fixed on a pool which he called Lake Hernando de Soto, as the extremest source of the Mississippi River.

SNAG-BOAT—One of the inland fleet operated by the U. S. Government in river service

The upper river threads for 532 miles through a region of a thousand lakes. Starting from a level of 1,457 feet above the sea at Itasca Lake, it winds through woods and rapids till it plunges over the Falls of St. Anthony. At the Falls, below the city of St. Paul, the stream is 800 feet above the sea and 1,934 miles away from the ocean. Thence the river flows picturesquely, ever widening, through a region redolent of the adventures and legends of the early French explorers, over Hennepin's route, to the mouth of the Illinois, over Marquette's route and La Salle's route, below the Illinois; past the mouth of the Missouri, which led Marquette in 1663, to write: "I have seen nothing more dreadful. An accumulation of large and entire trees, branches, and floating islands, was

THE MISSISSIPPI RIVER AT FLOOD, MINNESOTA
Showing islands formed by overflow of the river

MISSISSIPPI STEEL BARGE
New type plying the river between St. Louis and New Orleans

issuing from the mouth of that river, Pekistanouï, with such impetuosity that we could not without great danger risk passing through it. So great was the agitation that the water was muddy, and could not become clear." The upper Mississippi was for many years a frequented waterway for steamers, curving indolently through the beautiful reaches and bends, past the thriving towns, skirting the prairies of Illinois and Iowa. Except the planed-out rapids of Moline and Keokuk, there is smooth water all the way from St. Paul to the sea. Below the junction of the Ohio, the Mississippi flows continuously through bottom-lands, which the river has for ages been carrying down from the mid-continent. From Cairo to the Gulf is about a thousand miles of crooked, uncertain, changeful, yellow water.

For sixty years this serpent river was the national highway from north to south. Never was journeying more delightful; the steamboats wound from side to side to seek the deepest channel; they landed anywhere for wood or freight; the black roustabouts were equally picturesque, at ease or trotting up and down the gangplank carrying their loads; the river passed quaint old towns: New Madrid, Napoleon at the mouth of the Arkansas, Natchez under the hill, Baton Rouge; finally, it

From "The Log of the Easy Way," Small, Maynard & Co.

SHANTY BOATS AT ST. LOUIS—Eads Bridge in the background

swept up to the levee of New Orleans, where fifty other boats might be lying. The traveler may still find steamer accommodation for the enjoyment of this delightful care-free travel. Beyond the Crescent City is a hundred miles of deep water now traversed by great numbers of ocean steamers; below, the Eads jetties narrow the stream so that it scours out a channel to that sea whose salt waters LaSalle tasted in 1682, when he claimed the valley of the great stream for his king.

Transit

From its first discovery the Mississippi has been a water road, and the destinies of North America have been profoundly influenced by the

From "The Log of the Easy Way," Small, Maynard & Co.

WATERFRONT AT MEMPHIS

simple phenomenon that water runs down hill. For a man may start his boat at the foot of St. Anthony's Falls, or below the Great Falls of the Missouri, or on Lake Chautauqua, and if he keeps in the current, and away from the sand-banks, and out of the reach of snags, he will reach the sea by the simple force of gravity. The prosperity of the earliest settlers in the Mississippi Valley was due to their ability to float their surplus food-stuffs to market, as a boy dispatches paper craft down a gutter. Hence the fierce controversy when the Spaniards (1783-1795) undertook to control the Mississippi trade by laying duties on the produce bound down to the sea, and on the goods bound up—a controversy that made inevitable the American annexation of the mouth and of the western side of the Mississippi. But the lower Mississippi is a treacherous stream, and commerce, from skiffs and flatboats to the palatial river steamers of the '60's and '70's, paid a terrible toll of loss by fire and sinking.

From "The Log of the Easy Way," Small, Maynard & Co.

INTERIOR OF A SHOW BOAT

By 1890, the river was paralleled by railroads, which did not suffer from high water, and were not obliged to trans-ship from road to steamer and then back to railroad again. The upstream lumber trade decayed, because the best trees in Wisconsin and Minnesota had been cut. The picturesque timber rafts from the upper Ohio ceased, the lower river was despoiled of its glorious steamboats. In vain has the Federal Government paid out millions in the effort to bind the river between slopes of concrete and piles. The river trade could not bear the competition of rail, and nowadays is confined to local traffic and to steamers pushing coal barges.

The efforts to improve the channel have been closely connected with the levee system, which protects the back country from floods. This began two centuries ago, but has never been completed, because the river in flood cunningly seeks out the weakest places. There have been years of high water when the levees held for a thousand miles, and then came a break and hundreds of square miles were submerged.

CAIRO, ILL., DURING THE FLOOD OF 1913
A part of the forty-mile-wide swollen waterway

People have a queer notion that the effect of the levees is to cause the river to fill in between, forming a trough above the level of the surrounding country. Those that propagate this delusion have never seen the Mississippi scour out a hole in the bottom of a channel, or eat into the outside curve of its bank. Recently the suggestion has been soberly made that the Government ought to build viaducts to carry the branch rivers across stretches of flat country, so that the Mississippi floods could safely rush underneath. One might as well try to choke Mt. Etna and prevent the lava from bursting forth as to stop the floods of the Mississippi River by such devices. Among the interesting things on the modern river are the immense bridges, of which there are nearly fifty between St. Paul and Memphis, including the famous Eads Bridge and the Merchants' Bridge at St. Louis. Somehow the engineers contrived to get a foundation for their piers where the silt is a hundred feet deep. In time a railroad bridge will put its handcuffs on the river at New Orleans.

For a long time the advancing wave of settlement in the West rolled toward the Mississippi. By 1810, it was crossing it into the present State of Missouri. Twenty years later the van of the frontier was half way between the Mississippi and the Missouri, and by the year 1900 all the lowlands and larger valleys in the mountains were full of folk. The Mississippi and its western branches were well traveled roads into the wilderness. A school of Western statesmen arose. Clay and Jackson and Benton and

VIEW OF NEW ORLEANS
Showing the shape of the river that gave rise to the name, "Crescent City"

Douglas were full of the Mississippi spirit; Abraham Lincoln lived on a tributary, and in his youth made that famous flatboat journey down the great river that helped to fill his soul with the horror of slavery, some incidents of which he had witnessed.

The lower Mississippi is forever entwined with some of the most dramatic scenes of the Civil War. At Belmont, just below Cairo, U. S. Grant won his first victory in 1861; at New Madrid and Island No. 10 the fresh water navies of North and South measured their strength. Up the river, through the delta, came the Union fleet in 1862, which destroyed the covering forts and took New Orleans. Around Vicksburg raged Grant's famous campaign; the siege, the earthworks of which are still visible in the environs of the city, ended with the capture of the Confederate army on July 4, 1863. This was followed by the occupation of the lower course of the river. The control of the Mississippi was one of the factors that most contributed to the final success of the Union arms.

Upon the Mississippi River is strung a necklace of rich and beautiful cities, five of which, the twin communities of St. Paul and Minneapolis, St. Louis, Memphis and New Orleans, are among the first group in the Union in population and wealth. Interspersed are the old river towns, most of them now also on railroads—Hastings, and Redwing, La Crosse and Prairie du Chien; Dubuque, Rock Island, Quincy, Hannibal and Alton; Cape Girardeau, Cairo, Helena, Greenville, and the rest. Some of them still contain eighteenth or even seventeenth-century buildings, and some abound in the sense of motion and life that goes with a waterfront. No wonder the people of Louisiana talked about the "coast of the Mississippi." It was to them a Nile for fertility, a Rhine for navigation, a Danube for trade.

SOUTH PASS. Jetty and lighthouse at mouth of the river, one hundred miles south of New Orleans

SUPPLEMENTARY READING

THE MISSISSIPPI RIVER *By Julius Chambers*

A SHORT HISTORY OF THE MISSISSIPPI VALLEY *By J. K. Hosmer*

HIGHWAYS AND BYWAYS OF THE MISSISSIPPI VALLEY *By Clifton Johnson*

LIFE ON THE MISSISSIPPI *By Mark Twain*

THE LOG OF THE EASY WAY *By John L. Mathews*

REPORTS ON MISSISSIPPI RIVER PROJECTS *U. S. Superintendent of Documents*

***Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

While exploring the Lake Itasca country some years ago, Mr. Julius Chambers and his party, after crossing a tamarack swamp, "emerged from a tangled mass of hazel and willow bushes into a pretty meadow through which meandered a little stream not more than eighteen feet in breadth. It was the Mississippi!" Such, near its source, is the mighty river that drains the center of a vast continent through a course of 2,500 miles.

★ ★ ★

The source of things always appeals to us—the acorn that yields the sturdy oak, the tiny seed that gives us our garden products, the spring that feeds the mill stream, the rivulet that starts the broad-bosomed, far-flowing waterway. The same attraction, even stronger, draws us toward the sources of human things—the humble home in which a great man or woman first saw the light of day, the crude experiment that opened a new chapter in scientific history, the simple word of truth that started a world-wide movement, the stirring sentiment that gave birth to a new nation.

SOURCES OF THE MISSISSIPPI

★ ★ ★

Man's searching for sources is instinctive. He will not rest until he has traced the streams of life to their original springs, and has marked and mapped them to his satisfaction. He must know and understand the causes and beginnings of things. Through all the centuries, however, the first and supreme Cause has baffled Man's search. The source of many things he has learned. His own origin remains a mystery. The river begins with the mountain rill, and Man knows the very spot from which it starts. But he knows not whence he came himself.

★ ★ ★

From the dawn of time Man has been searching for the secret springs of life. Philosopher, scientist, explorer, and adventurer alike have spent life-long energies of mind and body in endeavors to look into the "seeds of time," and see how each one grew. The alchemists devoted years to experiments in the hope of finding the "Philosopher's Stone." The Rosicrucians studied deep to discover the "Elixir of Life." Ponce de Leon and other romantic and venturesome souls sailed long over strange seas to find the "Fountain of Youth." But the wells of life have remained hidden "in caverns, measureless to Man." Perhaps some day, under the searchlight of science, the original principle of existence may become known. Perhaps, on the other hand, the mystery is not to be unfolded, and the seeker of sources, like Omar the Persian, must evermore, without result, "go out by that same door wherein he went."

★ ★ ★

Only in faith can an answer be found. Faith reaches out to the spring sources and finds its refreshment there. Faith goes hand in hand with courage. Faith protests against the despondent spirit that broods on the end of all things, and insists that life is a succession of beginnings. The passing of life and energy in one form is the beginning of life and energy in another form. We are ever at the sources of things, never at the end. And we are convinced that the part we play in the scheme of things is constructive. As Robert Louis Stevenson expressed it: "We may be sure, although we know not why, that we give our lives, like coral insects, to build up insensibly, in the twilight of the seas of time, the reef of righteousness; and we may be sure, although we see not how, it is a thing worth doing."

W. D. Moffat

ONE

ON a frequented Alpine highway between Switzerland and Italy stands the somber gray hospice named for the good Bernard de Menthon, whose statue overlooks the shelter he founded in the year 962 for the benefit of pilgrims going to Rome. The snow on this mountain road eight thousand feet above the sea is a dangerous menace to the thousands of travelers that pass this way from September to June, and untold numbers have been saved and guided to the hospice by dogs of extraordinary scent, splendid courage, strength, and intelligence. The first dogs employed by the monks of St. Bernard came from Spain, but the blood of the Great Dane, mastiff, native sheep-dog and Newfoundland is in the present race of St. Bernards. Only short-coated dogs are used, as the snow impedes the progress of long-haired specimens. Full-grown St. Bernards at the hospice kennels often weigh 150 pounds and stand thirty inches high at the shoulder. Their strength is sufficient to drag or carry a man for a long distance. In summer the monks teach the young dogs to search the drifts in the valleys for men who bury themselves in the snow, and in this way they are trained for rescue work. During the season of tempest and avalanche, the dogs are constantly at the call of the Brothers, of whom there are about twenty in residence at this, the second highest dwelling-place in Europe. Within recent years telephone communication has been installed between the summit of the pass and the base. When travelers leave from inns on the Swiss or Italian border, the hospice is advised. If a storm threatens or the expected travelers do not arrive in due time, the monks start down the mountain-side with their trained and willing companions. Sometimes the monks themselves are blinded by hurricane and snow and, walking the hidden brink of steep cliffs, are drawn back by the sagacious creatures at their side. On occasion, groups of dogs are sent out alone to meet toiling wayfarers and guide them to safety. The far-renowned Barry, to whom forty persons owed their lives, is commemorated by a monument near the monastery which represents him with a little girl on his back. This child he warmed to life when he found her half dead in the snow, and by his knowing pantomime succeeded in persuading her to climb on his back, and thus ride to the shelter of the welcoming hospice.

THE NEWFOUNDLAND

In Newfoundland and adjacent islands the Newfoundland dog is the sole beast of burden in certain rugged localities. He draws wood and game, and on fishing-boats large hairy dogs frequently act as retrievers of fish that fall from the deck in loading. "Most of them," says a traveler, "boast at least a strain of that Newfoundland breed of which even a trace seems to ennoble the most outlandish of mongrels. When the master puts out to his vessel, Jacko swims after, though the distance may be upwards of a mile, and the water wintry cold." So far has the breed deteriorated in its original habitat that when the Prince of Wales, now King George IV, visited the colony some years ago, a committee appointed to select a genuine Newfoundland dog as a gift was able only with the greatest difficulty to find one worthy of the royal guest. In England and America there are still a few dogs that emulate Landseer's "Distinguished Member of the Humane Society," painted in 1838 and later chosen as the model head for a now somewhat rare Newfoundland postage stamp. Robert Burns extolled the Newfoundland in "Twa Dogs," and to a noble member of the same species Lord Byron erected at Newstead Abbey a monument "To mark a friend's remains. . . . I never knew but one," he mourned, "and here he lies."

THE GREAT DANE AND THE MASTIFF

The Great Dane, whose history fails to disclose any relation whatsoever to Denmark, has been called "the ranking member of the dog world," because from ancient times it has so often been portrayed at the side of nobles and statesmen. Prince, a famous Great Dane that was taken to England by his American owner, had a special audience with Queen Victoria. He was said to have stood thirty-seven inches high to the top of the shoulder. Size and symmetry are the distinguishing features of this imposing breed, which is well represented in this country. In the words of an expert, the Great Dane of high degree "must show speed lines, with weight and strength."

The antecedents of the mastiff, like those of the Great Dane, were used in wild boar hunting in the Middle Ages. Dr. Caius, an eminent English scholar, described the mastiff of the sixteenth century as "vaste, huge, stubborne, ougly and eager." The mastiff of modern breed was at the height of its popularity twenty years ago. Of mongrel origin, crossed with the Great Dane and the St. Bernard of old-fashioned type, specimens of the animal were exhibited at American dog shows whose weight frequently approached one hundred and forty pounds.

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BRAN, "the mountain torrent," is known to readers of ancient British history as the comrade and aide of the chieftain, Fingal. His fame is sung for his prowess in the hunting field, and on the field of battle. Like other dogs of Ossian, the semi-historical Gaelic bard and warrior of the third century, Bran was an Irish wolfhound, akin to the greyhound, but rough and curly-haired, and tall enough to lay his head on the shoulder of his master sitting at table. In his "History of Animals," dogs of this renowned family are described by Oliver Goldsmith as standing four feet high. Sometimes they were protected in the hunt by "laced doublets, studded with metal points." After the wolves of Ireland were exterminated, the wolf dog became practically extinct, but the breed has within the past fifty years been revived to some extent. The Scotch deerhound, agile but not so strong, hunted the fleet-footed denizens of the Highlands. Staghounds were first recorded in the reign of Queen Elizabeth.

Philip the Good of France (born 1396) numbered in his hunting entourage thirty superintendents and pages of the kennels, eighteen valets of the running hounds, six of the spaniels, six of small dogs, six of English dogs (mastiffs), six of Artois dogs (matins), and twelve bakers of dog bread. Some extraordinary representations of hunting hounds illustrate "The Master of Game," that classic of medieval sport written by Edward Plantaganet, second Duke of York, between the years 1406 and 1413.

In this manner the younger Xenophon commemorated his good greyhound: "I have myself bred a swift, hard-working, courageous, sound-footed dog, most gentle and kindly affectioned, and never before had I such a dog. When not actually engaged in coursing, he is never far away from me, and he has many different sorts of speech...Now, really I do not think I ought to be ashamed to chronicle the name of this dog, or to let posterity know that Xenophon the Athenian had a greyhound called Hormé, possessed of the greatest speed, and intelligence, and fidelity, and excellent in every point."

The Italian greyhound, diminutive and delicate in type, frequently appears in pictures of royalty, and has a fascinating story all its own. The Russian wolfhound, a shaggy, swift-footed and picturesque breed, is described as "the noblest-looking as well as the newest addition to our bench of sporting hounds. Like its Irish prototype, it bears a great affinity to the greyhound. Except for its fleecy coat and feathered tail, it is practically built on greyhound lines with certain modifications. The veriest tyro, having once seen it, can recognize a borzoi head, with its thin, narrow, Roman-nosed contour, and its long, fine muzzle. The grip of these hounds is far in excess of what one would give them credit for, and the boast of their masters in their native land is that we have no hound so tenacious of holding on to its quarry."

Izaak Walton avows his love for the music of a pack of dogs. The foxhound and the harrier, the otterhound and the beagle have no physical relation to breeds of hounds afore-mentioned, but are all a part of English sporting tradition. The name "beagle" appeared over four hundred years ago in literature. A plaything of court ladies, this small hound is said to have fitted into a knight's gauntlet—"its voice was so small compared with that of foxhounds that another name for them was 'singing beagles,' and efforts were made to get voices of different tones to chime melodiously." Since Colonial days the beagle has received the favorable attention of American huntsmen, many noted packs having been maintained in the South and East. Packs of English foxhounds are sometimes unsuccessful in this country, because of geographical conditions, and similarly American trained dogs may fail on English soil.

Like the long-bodied, short-legged basset hound of France, the badgerhound, or dachshund, is an abnormal type of hunting dog. James Watson describes the basset as a large badger-hound with a head resembling a bloodhound. In the days of the Scottish kings, bloodhounds, also called sleuth hounds, were kept on the Border to track fugitives. History says that Robert Bruce was repeatedly tracked by such dogs, and on one occasion escaped by wading in a brook, thus throwing his pursuers off the scent. Landseer painted the bloodhound of his time—a representative of the breed that had a lower skull, a less pronounced "wrinkle," and shorter flews than the dog that breeders prize today.

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THE terrier derives its name from *terra* (earth), and "denotes a variety of dog remarkable for the eagerness and courage with which it attacks all quadrupeds from the fox to the rat." Terriers are classed as smooth and rough-haired, and originated in Great Britain and Ireland. Dr. Caius, in 1565, described them as "Terrars, which creepe into the grounde, and by that means make afrayde, nyppe and byte the Fox and the Badger." For many years, as dog styles go, the most popular member of the breed was the smooth-coated fox terrier—strong, lively, swift, enduring, symmetrical in body, active in mind, and a rare dog as a pet. The wire-haired fox terrier has of late superseded its cousin in the favor of fanciers. Old prints and paintings corroborate the statement that the former is of the more remote origin. The famous sire, Meersbrook Bristles, imported from England twenty years ago, had a progeny so distinguished and true to family tradition that he is credited with having changed the type of the wire-haired terrier in America. According to present-day standards, this species "should resemble the smooth sort in every respect except the coat. The harder and more wiry the texture of the coat is, the better." The head of the wire-haired fox terrier is classed as finer than that of its smooth-haired prototype.

The Airedale terrier has as ancestors a rough terrier of Yorkshire, the pugnacious bull terrier, and the otterhound. Developed by the mill-hands of Aire for fighting and poaching, the breed finally came into favor for qualities other than those of a gamester and marauder. Since 1898 this dog has been conspicuous at Canadian and American shows. "What a dog can do, an Airedale can do it," says his champions. "Very sensible and intelligent; will retrieve on land or water; excellent in driving cattle, and will kill vermin against any other breed of dog; game as a pebble, and first-rate guard—the best all-round dog living, and no one could get a better companion." Rolf, the wonder-dog of Mannheim, whose intellectual achievements have so mystified psychologists, is an Airedale.

The Yorkshire terrier is named for the county of England where the type was developed from a work-a-day cross-bred dog to an aristocrat with a remarkably long, straight, steel-blue coat of silky hair.

Irish terriers have a distinctive head and a "keen, varminty expression." "When 'off duty,'" says an admirer, "they are characterized by a quiet, caress-inviting appearance, and when one sees them endearingly and timidly pushing their heads into their masters' hands, it is difficult to realize that at the 'set-on' they can prove they have the courage of a lion, and will fight to the last breath in their bodies."

The bull terrier has been classed as an individual breed for nearly a century. "The wisest dog I ever had," wrote Sir Walter Scott, "was what is called a Bull-dog Terrier. . . . Camp certainly had a singular knowledge of spoken language." Contrary to common understanding, this terrier, like the white English terrier, is of British, not American, origin, though American-bred dogs of this class now more than hold their own with the best of those sired across the water. Essential marks of thoroughbreds are the high, pointed ears, the oblique set of the small wise eyes, and the all-white coat. Possessed of the determination of the bull-dog and the activity and aggression of the terrier, they have renown as fighters, and only their special champions praise their dispositions.

Sir Walter Scott betrayed his love for all dogs in his devotion to Camp, Maida, Hamlet, Finette, and a gallant crew bred in his imagination. "Dandie Dinmont," James Douglas in life, was the owner of Mustard and Pepper, two game little terriers to whose descendants the name of the old border farmer in "Guy Mannering" was applied by Scott. The bright dark eyes of the Dandie Dinmont, like those of the Skye and some other long-haired terriers, are veiled by an overhanging fringe of hair that gives them a somewhat impish appearance. Poodles from wrecked ships of the Spanish Armada, crossed with native British dogs, produced the Skye terrier. The shrewd, long-bodied Scottish, West Highland and Welsh terriers found wide acceptance in America.

The companionable Boston terrier, whose popularity never wanes, is a comparatively recent American product. Its progenitors were the brindle bull-dog and the bull terrier. A club of Bostonians was formed twenty years ago to secure recognition for the breed, and thus it got its name.

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BALLY SHANNON

THE MENTOR is fortunate in being able to reproduce the picture of a hero of heroes, one that has proved twice over the valiant stuff that dogs are made of. Bally Shannon, an Irish wolfhound, was taken by a British officer into the trenches, and served there as a Red Cross dog until wounded in the left shoulder by a shell. His master was also wounded, and together they were invalided home. Crossing the English channel, the hospital ship on which they rode was torpedoed in the night. The officer and two others found refuge on a piece of wreckage, but there was no room for Bally Shannon, and his great weight would have submerged the others. When he attempted to get aboard the floating timbers, his master warned him back with a gentle word of explanation. And Bally understood. Thereafter he made no effort to climb out of the icy waters; only when he grew over-weary he came close and rested his shaggy head and fore-paws on the edge of the improvised raft until he had strength to go on paddling about in the dark and the cold. At daylight they were saved, and later the dog and his master came to America to recuperate from wounds and exposure. Since then, though not fully recovered, Bally has again been a dog of service, helping the shepherd in Central Park, New York, to guard the sheep that crop the grass—tame work enough after succoring wounded soldiers on the battle-field. But his friends hope a life among peaceful surroundings will some day soften the sorrow of his war-troubled eyes.

The dogs of Alaska, says Belmore Browne, "make the northern world go round." They haul men and freight from one end of the year to the other, they are the mail carriers over ice and snow, and they bear packs sometimes weighing forty pounds, containing the stores and implements of miners and explorers. The malamutes, huskies and Esquimo dogs of northern regions are sometimes of pure strain, but, running free in Indian villages and in distant camps, most of them boast the blood of a variety of breeds. Often one seas specimens half or one-quarter wolf that bring to mind valiant episodes in Jack London's "Call of the Wild" and "White Fang." Among hundreds of A askan dogs that have gone overseas to do duty with the allies in France, several have received gold collars, war medals and other decorations for the faithful accomplishment of hazardous errands.

In Thibet and the Pyrenees there are species of herding dogs quite distinct from those bred in Scotland. The Book of Job mentions dogs that watched sheep on the hills centuries before the Christian Era. "There is no breed," says a lover of the sheep-dog, "with such a wise look as the collie." Burns called him a "gash (wise) and faithful tyke," whose "honest, sonsie, bawsn't (taking, white-streaked) face aye gat him friends in ilka place." In the words of a good judge of dogs, "there is not a more graceful and physically beautiful dog to be seen than the show collie of the present period. His comeliness will always win for him many admiring friends." But as a sheep-tender this aristocrat with the long, narrow nose and mantle of superb color, weight and texture, would be scorned by a Highland flock-master, whose strong-limbed dog, hardened in service, and wise with the wisdom of generations of his calling, can do work that otherwise would require the combined efforts of a dozen or more men. "Without the shepherd's dog," wrote "the Ettrick Shepherd," "the whole of the open mountainous land of Scotland would not be worth a sixpence."

It is said that the tails of Old English sheep-dogs were originally docked by the owners because as assistants to Man in his labors they were exempt from taxation, and the herders determined this method of distinguishing them from idle pets.

"Police dogs," on the authority of Sergeant Jager, author of "Scout, Red Cross and Army Dogs," "were first tried out in the city of Ghent, Belgium. When the movement developed in other countries, the first step toward improvement was to find the most suitable dog for the work. After a number of years of experimenting, the breeds simmered down to the (then so-called) shepherd dog of Germany, the Belgian sheep-dog, the Doberman terrier and the Airedale." To a great extent these are the types that are on duty with the armies of the World War, and all have specific qualities that fit them for service of immeasurable value.

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THE antiquity of the spaniel family may be gauged by the fact that the royal Edward in "Master of Game" translates in the quaint English of his time a description written in 1387 by Gaston, Count de Foix, of this dog originally bred in Spain—a hunting-dog "with a fair hue, white and tawny; not too wavy, but his tail should be rough; loving his master well, and following him without losing, though he be in a great press of men; and their right craft the hunting of the partridge and the quail."

From the remnants of an almost moribund race, the late Justin McCarthy, the English historian, evolved the doughty Irish water spaniel. For this representative of the species friends claim, not beauty, but extreme intelligence in hunting over a boggy country where snipe and wildfowl abound. For this work he has been provided "with an excellent nose, an almost water-proof coat, the sporting instincts of a true son of Erin, and a disposition full of good sense." The English water spaniel has come down to us from the ancient "water-dogge," forefather of the poodle. The Clumber spaniels are descended from a kennel brought from France by the Duc de Noailles toward the end of the eighteenth century and presented to the second Duke of Newcastle, master of Clumber Park. At field trials established among sportsmen to test the speed, scent and staunchness of gun dogs, Clumbers invariably maintain a high reputation among others of their family. Field spaniels ("distinguished from the cocker spaniel on one hand and from the springers, other than Clumber and Sussex, on the other") may be black or colored; some have a groundwork of white with markings of black, blue or red roan, liver or tan. In distinction to setters, all spaniels are springers, and certain classes of spaniels, such as the English and Welsh springers, retain this name. Most charming of companions and active of game dogs is the blithe little cocker, a fascinating small relative of the larger breeds of spaniels, possessed of a silky coat, long wavy ears, eyes full of life and expression, and disposition sensitive, tractable and kind. As gunners' aides a team of cockers will work for hours at a time among brambles and bracken to stir up rabbits and birds, "reconciling the greatest activity with perfect immobility at the flushing of game, or the sound of a gun."

In the words of Herbert Compton, an English authority, "the setter is probably the oldest, and certainly the most elegant and beautiful of our gun dogs. The ability to 'set' or 'couch' at game was one developed in certain dogs by our sporting ancestors in the days when the hawk and the falcon performed the offices of the modern gun. The setter of that period, known as a land spaniel, accompanied the hawking parties into the field, quartered the ground, and indicated where the game lay—no doubt in much the same fashion as it does today. The first dog to be trained to this service is said to have been one belonging to the Duke of Northumberland in the middle of the sixteenth century, but it is certain that dogs which had the ability to 'set' were known before that period." Dr. Caius was the first one to apply the name "setter" to this species. In 1570, he wrote, "Another sort of dog there be serviceable for fowling, making no noise either with tongue or foot whilst he follows the game. When he hath found the bird he keepeth sure and fast silence, and stayeth his steps, and will proceed no farther, and with close, covert, watching eye, layeth his belly to the ground, and so creepeth forward like a worm. When he approacheth near to the place where the bird is, he lays down, and with a mark of his paws betrayeth the place of the bird's last abode, whereby it is supposed that this kind of dog is called 'Index'—Setter is a name both consonant and agreeable with his quality."

Anecdotes, many of them too extravagant to be readily believed, adorn the history of the pointer. Pluto and Juno, two specimens celebrated in their time (a hundred years ago) are said to have pointed for over an hour and a half while an artist painted their picture. But many remarkable feats of the pointer are a matter of record, both in field trials and at work with their masters. A writer of another day describes this dog's "airy gallop, his lashing stern, his fine range, his magnificent dead-stop at game, his rapid turn to catch the wind of the body-scent, his perseverance to catch a faint and hardly perceptible stain of game borne to him on the breeze; his glorious attitude as he becomes (directly his widespread nostrils assure him he is right) stiff and motionless, with limbs widespread, head aloft, stern held high."

The retriever aids in finding the game and fetching it after it has fallen. The well trained retriever must have a "tender mouth", and never maul the prize he brings to hand.

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PEKINGESE SPANIELS—SUTHERLAND AVENUE HAN KU. TOD KI SHUAI OF TODDINGTON. TOUCHI AND YEN HOW PING

THE story of the Pekingese spaniel, recently exalted to a high place as milady's toy, involves the names of royalty and of high military and naval dignitaries. When the Summer Palace at Peking was looted in 1860 by the English and the French, the invaders found in a garden five imperial dogs that had escaped from their official guardians, the eunuchs of the court. According to Lord John Hay's account, he and a brother officer took all but one of the dogs, and that one was presented by General Dunne to Queen Victoria. Inquiry revealed the fact that all the other Palace dogs, or dogs of the Sacred Temple of Peking, had been taken away by the members of the court to their retreat. It is therefore reasonable to surmise that the race so widely propagated in our day owes its chief origin to these five spaniels seized as spoils of war over a half-century ago. During the Boxer Rebellion, the fact was confirmed that this breed of spaniels is especially cherished and guarded by the royal family of China, when other kinds of spaniels, and pugs and poodles, were found in the Palace by the Europeans, but no imperial dogs, they having been sent away to the refuge at Si-ganfu. A further element of interest was introduced into the story of the Pekingese when, about fifteen years ago, an English gentleman of affairs in China succeeded in having a veritable specimen of the Celestial dog smuggled out of the country in a crate that enclosed some deer that were being shipped to England. The dog was secreted in the hay provided for the deer and thus escaped detection. The coat of recognized descendants of original specimens of the breed is golden chestnut, with "trousers," tail and feathering a paler shade, and the muzzle and tips of the ears black; the legs are bowed, the tail curled, and the eyes prominent and brilliant.

The black and white Japanese spaniel of the disdainful nose is one of several races of "sleeve dogs" bred by the people of the East. As the name indicates, it is small enough to be carried in the flowing sleeve of the Oriental. Thoroughbred specimens commonly weigh five to seven pounds, and one mite named Kara is recorded as having counted exactly as many pounds as years when two and a half years of age.

Macaulay is authority for the statement that Charles II of England liked to stride among the trees with a bevy of toy spaniels at his heels. In token of this sovereign's fondness for the breed of spaniels petted in his day, these small dogs, "gentle, loving and courteous to man," bear his name. Of probable Japanese origin, they so ingratiated themselves into the hearts and tastes of the English that, in various forms and varieties, the toy spaniel was frequently pictured on canvas and loom. Van Dyck, Watteau, François Boucher, Greuze, and great English painters delighted to introduce this gay little dog into portraits and fanciful representations. No other breed has been so often portrayed as the companion of ladies, children of gentle birth, and exquisites of noble station.

"The offspring of the stock of Malta," referred to by Theophrastus about the year 300 B. C., and described by his master, Aristotle, at a still earlier period, is said to have been the favored lap-dog of fashionable women in the time of the Roman emperors. Not infrequently in our day proud owners of these silky little white blooms of dogdom display their diminutive form by exhibiting them in the silver cups awarded at bench shows. In size the Maltese dog resembles the Oriental spaniel, but has a more lively expression.

Before the War, visitors to Brussels remarked the prevalence of the quaint, tawny toys called Brussels griffons, which so often accompanied Belgian ladies to market on the Grand' Place, or for afternoon walks on the Avenue Louise. Forty years ago, the same game little dogs, less well groomed, perhaps, but equally popular with their masters, used to ride back and forth in the pockets of mid-England miners, and emerge at the noon hour to amuse hilarious gatherings by their alert manners and nearly human expression. In our time they have established themselves as favorites of the well-to-do.

The Pomeranian is an Arctic breed, whose ancestors lived amid the arid wastes of Siberia. From this desolate region a tribe of Samoyedes emigrated to Pomerania, now part of Prussia, on the Baltic Sea. Rivalling the Pekingese in fashion at the present time, the miniature descendants of this ancient race are sprightly, intelligent and devoted. The color of coat most desirable is brown in varying shades, though wee dogs mantled in a straight coat of black, shaded sable, orange or smoke-color, are also admired.

Besides the toy breeds mentioned in the foregoing paragraphs, the Kennel Clubs of England and America recognize as toys, black and tan terriers under seven pounds in weight, miniature bull terriers under eight pounds, poodles under fifteen inches in length, Italian greyhounds, pugs and Yorkshire terriers.

PREPARED BY THE EDITORIAL STAFF OF THE MENTOR ASSOCIATION
ILLUSTRATION FOR THE MENTOR, VOL. 6, No. 16, SERIAL No. 164
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OUR FRIEND THE DOG

By WALTER A. DYER

Author of "Pierrot, Dog of Belgium," "Gulliver The Great, and Other Stories"

SCOTCH COLLIE Owner, Mrs. J. L. Morrell
Champion Southport Society

MENTOR GRAVURES

ST. BERNARD AND MEXICAN CHIHUAHUA

RUSSIAN WOLFHOUND

JUDGING WIRE-HAIRED FOX TERRIERS

BALLY SHANNON

ENGLISH SETTERS

PEKINGESE SPANIELS

"In Man true friendship I long strove to find,
But missed my aim;
At length I found it in my dog most kind.
Man! blush for shame."

IF the entire race of dogs were exterminated, the world would seem a strange place. Wherever there are men, there are dogs. Somehow they have managed to attach themselves inalienably to mankind. We make pets of horses, of cats, of birds, but the dog is the only one of all God's creatures that has made himself the real friend of man,—whose virtues of unselfish devotion and intelligent courage sometimes excel those of man himself. What manner of beast is this that has taken so unique a place in the scheme of earthly things? Was he given to Adam as a solace? Tradition says that when our first parents were expelled from Eden, the dog was the only animal that unquestioningly followed them. The legend illustrates the dog's character well enough, but science gives us a somewhat different explanation of his origin.

There are scientists who believe the dog was developed originally from the wolf. The wolf and the jackal can be tamed. They will learn

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to bark, and in other ways will act much like dogs. They possess many of the dog's unique racial characteristics and peculiar habits. Furthermore, the wolf and the dog will mate and produce fertile offspring, which is not usually the case with unrelated species. In this way the Arctic breeds and some others undoubtedly have crossed with the wolf,—the Esquimo dog, the Indian dog of Florida, and the chow-chow dog, through whose veins there runs the blood of the Mongolian wolf.

Owner, Wex Jones
BULL TERRIER
Frost

This, however, does not fully prove that the dog is descended from the wolf. The late James Watson, an American authority, pointed out, among other things, that the wild dog does not revert to the wolf. The probable truth is that the wolf family, *Canis lupis*, and the dog family, *Canis familiaris*, sprang from a common origin in the far-off prehistoric ages, and that they are not brothers, but cousins.

© Underwood & Underwood, N Y.
Owner, Charles Ludwig
GREAT DANE
Champion Primus L. v. Weisenau

At any rate, the dog has not been a wolf for many ages, and the modern breeds have not been developed from wolves, but from ancient wild dogs. Darwin said, "Looking at the domestic dogs of the whole world, I have, after a laborious collection of all known facts, come to the conclusion that several wild species of *Canidæ* have been tamed, and that their blood, in some cases mingled together, flows in the veins of our domestic breeds." Just what this ancient wild dog was like, we cannot know precisely, but it probably resembled the pariah dogs of the Near East, or the dingo of Australia.

Photo Underwood & Underwood N Y
TRAINING YOUNG ST. BERNARDS FOR SERVICE

Domesticated Dogs

From the earliest records of man, however, the dog appears as a domesticated or partially domesticated animal with marked variations in type. From the beginning he figures as a companion of the hunt and as a guard for sheep and goats. The bones of men and of dogs are found together among the remains of the

Courtesy Metropolitan Museum of Art, N. Y.
ERECT-EARED HOUND
FROM CYPRUS
300-400 B. C.

cave-dwellers. Evidence points to the existence of dogs in Denmark in the Newer Stone Age, the Bronze Age, and the Iron Age. One of the earliest dependable records is that of a large dog that lived with the lake-dwellers of Switzerland.

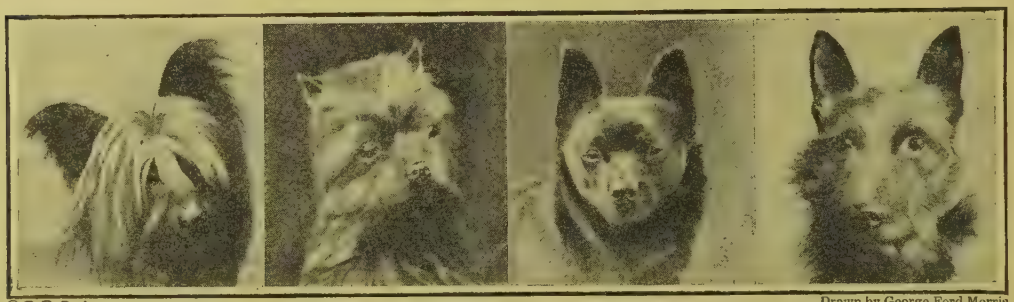
Scratchings on the rocks of the so-called Reindeer Period in Europe show dogs, men and reindeer together. There are also evidences of tame species of *Canidæ* in both North and South America at a very early period, and it is recorded that the ancient Peruvians practiced a form of dog worship. In Ethiopia a dog was once made king. The North American Indians and the Esquimos had dogs long before the coming of the white man.

In prehistoric times dogs were undoubtedly savage and half wild, but during the periods of higher civilization in Egypt and Assyria they were more thoroughly domesticated and the varieties became more numerous and more pronounced. Assyrian sculptures show at least two kinds of mastiff and greyhound types. Egyptian monuments of about 3000 B. C. depict many forms of domestic dogs, including a massive wolfhound, a drop-eared hound, a greyhound used for hunting the gazelle, and a small terrier-like dog that appears to have been a house pet. These dogs were held in high esteem, and every Egyptian town had its place for the interment of canine mummies.

Owner, Alex. H. Stewart
BULLDOG
Champion Strathtay Prince Albert

The Hebrews were not fond of dogs, and there is very little mention of them in the Bible. Among the Greeks and Romans, however, a kindlier feeling existed. The literature of Greece and Rome abounds with tributes to the courage, obedience, wisdom and affectionate fidelity of the dog. The Romans were familiar with at least three types: the *sagaces*, or trackers; the *celeres*, or coursers; and the *pugnaces*, or fighters,

NEWFOUNDLAND
Tip of Clark's Farm



© F. E. Burley — Drawn by George Ford Morris

SKYE TERRIER — BRUSSELS GRIFFON — SCHIPPERKE — SCOTTISH TERRIER

which were used as watch-dogs and war-dogs. It was before the time of the Romans, however, that the domestic dog had spread well over Europe, and many distinct varieties had sprung up in different regions. The oldest types are the mastiffs, the sheep-dogs and the greyhounds, and many breeds known today had their beginnings before the memory of man, such as the collie, the spaniel and the Irish wolfhound; the hounds, and the Great Dane's ancestor, the alaunt, are also of ancient lineage.

Courtesy C. S. R. Blue Book of Dogdom
Owner, Mrs. Maude Dickerson

TOY WHITE POODLES
Champions Kibo and Tiny Boy, and Little Fix-it

Modern Breeds

Nearly all our modern breeds, of which there are over a hundred, have interesting individual histories. Since it is not possible to arrange them chronologically, because the records of so many of them are lost in the mists of antiquity, the logical method is to group them by types.

©Underwood & Underwood, N. Y. — Owner, B. F. Lewis, Jr.

GREYHOUND
Champion Lansdowne Butcher Boy

Of the so-called non-sporting breeds, there are four that are remarkable for their size. The superb St. Bernard, famed in song and story, was originally a dog of undefined parentage that was trained to guide travelers over the Alpine snows and occasionally perform acts of rescue. About 1815, the breed became almost extinct, and the strain was crossed with that of other big dogs. The St. Bernard was brought to its present perfection in England. Both the rough and the smooth-coat varieties are recognized by kennel

clubs, but the former is the more common. The mastiff is reputed to be the oldest of the purely British dogs. Tradition has it that he was in England in Roman days and that he was used as a guard and for bull-baiting. The popularity of the splendid modern type has declined within recent years. The Newfoundland, also rarely seen nowadays, originated on the Island of Newfoundland a hundred years or more ago. Of mixed ancestry, it was improved and standardized in England, where the best specimens are now to be found. A jet black coat is preferred, though black and white and brown and white coloring is also acceptable. The Great Dane, at present the most popular of the very large dogs, is descended from the ancient boarhound of central Europe. The statuesque latter-day type is as intelligent and good tempered as it is active and watchful.

Photo Edwin Levick Owner, Miss Amy Bonham
BLOODHOUND
Champion Roar Uproar

Of the smaller dogs in this class, the bulldog is a British breed and came from so-called mastiff ancestry. He was used for bull-baiting and thus obtained his name. The extreme type with exaggerated width of chest and spread "elbows" dates from about 1880. The bulldog's traditional characteristics are courage, tenacity, devotion to his master and gentleness of nature. It was a bulldog puppy that inspired Maeterlinck's masterly analysis of canine habits and disposition. The French bulldog (*bouledogue français*) is regarded by fanciers as an offshoot of the English toy bulldog, which was taken in considerable numbers to centers of the lace-making industry in Normandy by Nottingham emigrants sixty years ago, and was there mated with a

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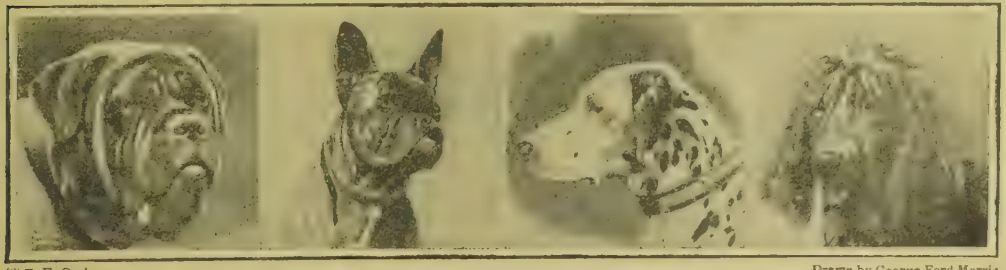
IRISH SETTERS
Midwood Red Jacket and Highway Coral

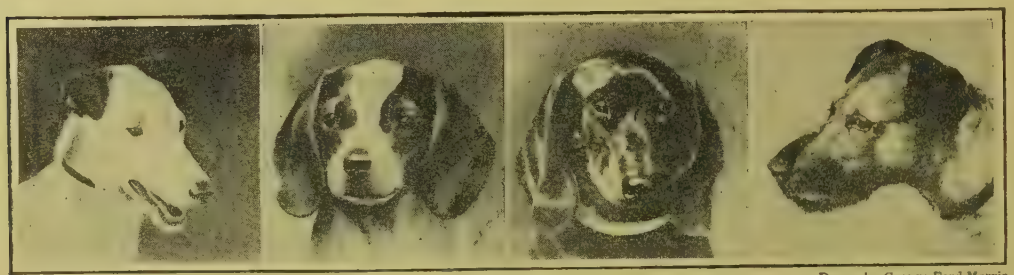


© F. E. Burley
MASTIFF

FRENCH BULLDOG

DALMATIAN

Drawn by George Ford Morris
IRISH WATER SPANIEL



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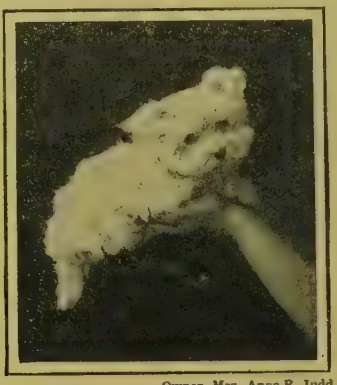
SMOOTH-COAT FOX TERRIER — BEAGLE — BADGER-HOUND — IRISH TERRIER

small native dog of Spanish or French origin. Though in certain countries dog meat is eaten in emergencies, the only dog specially bred for the table is the chow-chow, which in China, we are told, is considered an excellent substitute for roast mutton. The distinguishing features of this attractive breed, which of late years has been greatly in demand in England and America, are the striking color of the coat—bright red, dark red, blue-gray or all-white,—the blue-black tongue, and the "scowl" caused by the forward set of the erect, pointed ears.



Owner, Mrs. Anna R. Judd

MALTESE

Champion Melita White Baby. Photographed at four months; weight, one pound

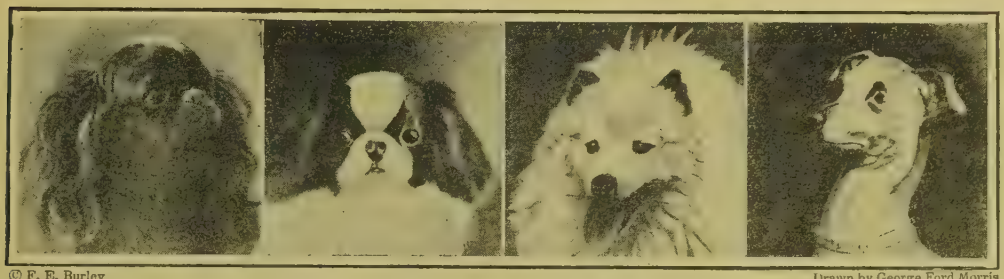
The poodle, reputed to be the wisest and most easily trained, if not the most amiable of dogs, has an unusually large cerebral cavity. Says the author of "Dogs and All About Them," "He is an adept at performing tricks, but it is his alertness of brain that places him apart from other animals. Paris was formerly the home of most of the learned poodles, and one remembers the instance of the poodle of the Pont Neuf who had the habit of dirtying the boots of the passers-by in order that his master—a shoe-black stationed half-way across the bridge—might enjoy the profit of cleaning them. White poodles are considered the most intelligent; the black come next."

POLICE DOG — Owner, John Gans

Champion Komet of Hoheluft

The schipperke (little skipper) is a small member of the spitz family which has been made tailless. It has long been a favorite with the masters of Dutch and Flemish canal barges, but has been known on this side of the Atlantic only a few years.

The spotted Dalmatian, smart, well built, and resembling its relative, the pointer, in shape and size, first received



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KING CHARLES SPANIEL JAPANESE SPANIEL SPITZ

Drawn by George Ford Morris

ITALIAN GREYHOUND

Owner. Mrs. Frank T. Clarke

POMERANIAN

Champion Ashton Wee Oliver

particular attention in the province of Dalmatia as a hunting-dog. In England it was employed about stables, and was trained to run with the horses and under the carriage.

Of shepherd dogs there are many breeds in all parts of the world, but only a few are familiar to Americans. The old working collie of Great Britain has been a distinct breed for centuries. Its patrician cousin, the modern collie, has a classic head, an abundant coat and mane, full-feathered forelegs and elegant plumed tail. The smooth collie is thought by some to be a strain of the British sheep-dog allied to the original mastiff stock; it has a short flat coat of thick hair. The Old English or bob-tailed sheep-dog, one of the hairiest of breeds, is either born without a tail or has the tail removed a few days after birth.

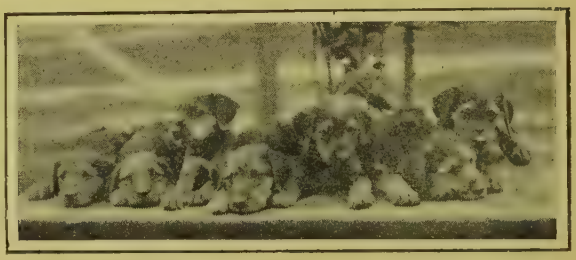
The breed imported as the German shepherd dog is now by vote of the national club of owners and by mandate of the Kennel Club of America called the Police dog. It looks and moves like a wolf and has proven itself adapted above other dogs to the work of aiding bodies of police in the detection and apprehension of criminals. The Belgian sheep-dog, recently introduced into this country, has also been employed as a police aid.

Sporting Breeds

The sporting breeds include the hound family, the greyhound family, and the bird or gun dog. The largest variety of its class is the bloodhound. This is not the mongrel beast used in slavery days, but a finely developed and reliable breed, wonderful as a trailer.

ALASKAN DOG

Carrying pack weighing forty pounds



"WE ARE SEVEN"—Airedale Puppies

The wire-haired otterhound, better known in England than America, descends from the old southern hound of Europe and probably has acquired some bloodhound blood.

The foxhound is the most popular sporting dog of England, his history being bound up with that of British hunting. As early as 1710 these dogs were trained to hunt in packs. There is also an American foxhound, somewhat smaller and lighter. The beagle is like a still smaller, finer foxhound, and has the same ancestry. In size, the harrier, or hare hound, stands between the two. The badgerhound (dachshund) is a canine dwarf remarkable for the disproportionate length of his body to that of his legs. The bassethound is a French relative, similar in shape, but hairy.

Courtesy C. S. R. Blue Book of Dogdom
Owner, Norman Mackenzie, Esq.
AIREDALE TERRIER
Champion King Nobbler's Double

The greyhounds, belonging to one of the oldest of the canine types, hunt by sight, while the hounds hunt by scent. The whippet is a diminutive greyhound used chiefly for racing, and is capable of running at the rate of forty-five miles an hour. The Irish wolfhound, a historic breed that became almost extinct in Ireland, is remarkable for speed, power, courage and sagacity. The modern type was developed from a few remaining specimens, and was reconstructed with the help of Great Dane and Scottish deerhound crosses. The hound last named is a close relative of the Irish dog, but is faster, lighter and less powerful. The Russian wolfhound, known in Russia as the borzoi, is closely allied to the Persian greyhound. For centuries he has been used in Russia for hunting wolves.

Bird dogs include the spaniels, the setters, the pointers, the retrievers and the French wire-haired pointing griffons, recently introduced with success on this side of the Atlantic. The spaniels are probably of Spanish origin, but they have long been domesticated in England. The breeds include the Sussex spaniel, oldest of the land spaniels; the clumber spaniel which is the largest; the field spaniel, usually black; the cocker spaniel; the English springer or Norfolk spaniel, and the Welsh springer. The cocker is the smallest of the sporting spaniels and the one most liked by Americans. The name has been used since about 1775, when this spaniel was used for woodcock shooting in Devonshire and Wales. The Irish water spaniel is a curly-haired dog, which, though doubtless possessing spaniel blood, resembles more closely the retriever and the poodle.

Photo Edwin Levick, N. Y. Owner, William Ziegler, Jr.
FIELD POINTER
Champion Mary Montrose

The three breeds of setters—English, Irish and Gordon—had a common parentage in which the old land spaniel played a prominent part. They were taught to crouch when finding game and were called setting spaniels until about 1800. The English setter,

Owner, Mrs. John Z. Adams
CHOW-CHOW
Champion Lord Cholmondely II

of various mixed colorings, is the most popular; the red Irish setter is considered the most beautiful; the black-and-tan Gordon setter is the rarest and the largest.

The retrievers are water dogs, probably related to the spaniels and the setters. The wavy-coated and curly-coated retrievers are the two most prominent varieties. Two retrievers of American development are the Labrador dog and the Chesapeake Bay dog.

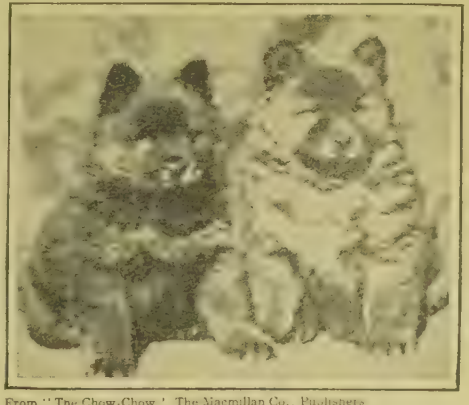
The pointers are distributed all over Europe and America, having first been developed in Spain. The dog of the present day has an intermixture of the southern hound and the foxhound in its veins, as the type originally introduced into England lacked dash and brilliancy in action. English sporting records relate the achievements of Drake, a tall, gaunt pointer that, on the scent of birds, could run "fifty miles an hour, and at this tremendous pace would stop as if petrified, the momentum covering him with earth and dust."

Owner, Mrs. F. M. Connor
COCKER SPANIEL
Champion Bellmore Buffkins

Terriers

The terriers, of which there are numerous breeds and varieties, come from an ancient type, though many of our present-day varieties are of comparatively recent development. At the time of the Norman conquest, small dogs of this type were used for hunting ground animals. The Manchester or black-and-tan terrier is the oldest surviving member of the smooth-coated terrier family. The bull terrier is related to the Manchester, with an admixture of bulldog blood. The Boston terrier is the only breed sponsored in this country. Its chief ancestor is the brindle bull terrier. The vogue of the fox terriers, both the smooth and wire-coated, began over a half-century ago with the inauguration of dog shows. In the seventeenth and eighteenth centuries they were chiefly the companions of grooms and huntsmen, and, running with the hounds, were always in at the death of the fox. The Doberman pinscher, one of several foreign terrier varieties, was imported to this country in 1907. In character he is like the Airedale, but in appearance resembles the Manchester.

The Airedale and Bedlington terriers were developed from old wire-haired English terriers, while the Irish and Welsh terriers have a similar history in their own countries. From Scotland we have a number of recognized varieties, including the Scottish terrier,



From "The Chow-Chow," The Macmillan Co., Publishers
CHOW-CHOW PUPPIES
Ragaburn and Ragabette

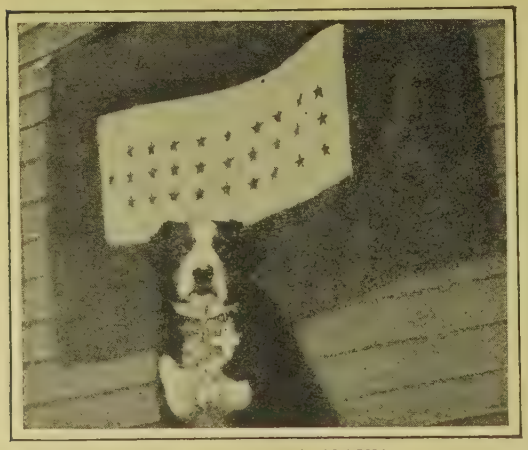
the West Highland white terrier, the cairn terrier, the Dandie Dinmont, the Skye, and the long-haired Clydesdale or Paisley terrier. The Sealyham terrier is a dog of similar type that comes from a Welsh strain, while the Yorkshire terrier is a fancy, long-haired dog developed in Yorkshire, England.

Photo Edwin Levick, N. Y.
A MODEL KENNEL
Owned by
Mrs. Roy A. Rainey,
Huntington, Long Island

Toy Breeds

Of the pet or toy breeds, several varieties have honorable histories. The Italian greyhound is a miniature greyhound that was bred in Italy in the Middle Ages. The pug once the most stylish of toys, is like a smooth-coated Pekingese, and was probably originally imported from China by the Dutch. The toy Manchester, toy bull terrier, toy poodle and miniature bulldog are artificially dwarfed breeds. The Chihuahua is the small dog of Mexico. The Pomeranian, especially in vogue of late years, is the smallest representative of the spitz family. The English toy spaniels, of which there are four varieties, have been in high favor as pets since Tudor days. The Pekingese spaniel has been the house dog of the Chinese emperors for centuries. The Japanese spaniel is probably a relative of the Pekingese and Thibet spaniels. The white Maltese dog, sometimes called the Maltese terrier, was known in Greece and Egypt and has been in England since the time of Henry VIII. The Brussels griffon, the only wire-haired toy of consequence, is the smartest variety of its kind. Of the so-called Arctic breeds, the most prominent are the wolf-spitz, the Samoyede of northern Russia, the Norwegian elkhound, which is not really a hound at all, and the Esquimo, husky and malamute of North America. There are a number of other recognized breeds of dogs in Europe, Asia and Australasia, but those named here are the ones that have been brought to North America.

Owner, Charles H. Mower
BOSTON TERRIER
Champion Auburn Happy, Jr.



BALDY OF NOME, ALASKA
Baldy wears a cross of honor, and behind her is her service flag with stars for 28 children she has contributed to war service in France

The Dog as Man's Friend

Man's debt to his four-footed comrade is constantly increasing, and can never be paid. It is the dog's character, different from that of any of the other animals, that has won for him his unique place in history, literature and art, and in the heart of Man. For it is the dog's nature to love human beings better than he loves his own kind. Through all the

ages he has made himself a comrade and helper, and we have had no choice but to accept him. As we study the dog we become more and more impressed with his outstanding characteristic of almost human personality. Sir Walter Scott wrote, "The Almighty, who gave the dog to be the companion of our pleasures and our toils, hath invested him with a nature noble and incapable of deceit. He hath a share of Man's intelligence, but no share of Man's falsehood." Literature abounds with incidents similar to that of Argus, the dog who alone of all the household recognized Ulysses, his master, when after years of wandering he came home in beggar's guise.

Important Breeds of Dogs

NON-SPORTING AND UTILITY.—*Large dogs:* St. Bernard, Newfoundland, Great Dane, Mastiff. *Smaller dogs:* English bulldog, French bulldog, Chow-Chow, Poodle, Dalmatian, Schipperke. *Sheep dogs:* Collie, Old English sheepdog, German shepherd or police dog, Belgian sheepdog.

SPORTING BREEDS.—*The Hound family:* Bloodhound, Otterhound, Foxhound, Harrier, Beagle, Bassethound, Dachshund or Badgerhound. *Greyhound family:* Greyhound, Whippet, Irish wolfhound, Scottish deerhound, Russian wolfhound. *Bird dogs:* Pointer, Setters, Retrievers, Spaniels, Irish water spaniel, Wire-haired pointing griffon.

TERRIERS.—*Smooth-coated:* Bull terrier, Boston terrier, Smooth Fox terrier, Manchester terrier, Doberman pinscher. *Wire-haired:* Wire-haired Fox terrier, Airedale, Bedlington, Irish, Welsh, Scottish, West Highland white terrier, Dandie Dinmont, Cairn terrier, Sealyham. *Long-haired:* Skye terrier, Yorkshire, Clydesdale.

TOY DOGS.—*Smooth-coated:* Italian greyhound, Pug, Toy Manchester terrier, Toy Bull terrier, Miniature Bulldog, Chihuahua. *Wire-haired:* Brussels griffon. *Long-haired:* Pomeranian, English toy spaniels, Pekingese spaniel, Japanese spaniel, Maltese, Toy poodle.

ARCTIC AND SUB-ARCTIC BREEDS.—Esquimo, Husky, Spitz, Samoyede, Norwegian elkhound.

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AMERICAN FOXHOUNDS—Meadowbrook Hunt Club, Long Island

SUPPLEMENTARY READING

THE DOG BOOK *By James Watson*

STANDARD OF THE BREEDS
C. S. R. Blue Book of Dogdom

DOGS AND ALL ABOUT THEM *By Robert Leighton*

DOGS OF GREAT BRITAIN, AMERICA AND OTHER COUNTRIES *By "Stonehenge"*

*** Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

Behold the Honorable Sir Bedivere, the most famous of all imported rough-coat St. Bernards, and one of the most celebrated figures in the history of Dogdom. No one who has had the privilege of seeing Sir Bedivere in his prime doubts this statement. He was the supreme figure in many dog shows in England and America. Seated on his bench, his head raised high, his front paws crossed, in the attitude of Landseer's "Member of the Humane Society," Sir Bedivere received with dignity the admiring tribute of thousands.

SIR BEDIVERE

Sir Bedivere was born in England in 1887, and, from his first public appearance in puppyhood, he swept everything before him. His winnings were more than those of any other dog of his breed, including many challenge cups, gold medals, pieces of plate, and so on. In 1890, he was brought to America for Mr. E. B. Sears of Melrose, Mass. At that time the St. Bernard was one of the most popular of breeds, great or small, in America. Thousands of dollars were spent for them, and competition was keen. Sir Bedivere arrived in America when he was three years old, and at the very zenith of his fame. Wherever he was shown he attracted unbounded admiration. He not only filled the eye as a superb example of dog beauty, but, as a direct descendant of noble sires, he was a striking illustration of the value of heredity. Sir Bedivere did not live to a great age, and he left no progeny approaching his own extraordinary qualities.

★ ★ ★

In making up our list of supplementary reading for this number, we have selected books of authority descriptive of the standard breeds of dogs. Such books, however, form the smallest part of dog literature. When we turn to the sentimental side of the subject we find enough material to fill a library of ordinary dimensions. There are dog books in all languages—true dog stories, dogs in romance and poetry, dogs in tales of adventure, and dogs celebrated in eloquent tributes of one kind or another. Many of these productions now stand among the classics of literature. "Rab and His Friends," by Dr. John Brown, has been read for generations and holds an enduring place in the human heart. "Greyfriars Bobby," by Eleanor Atkinson, is a fit companion for Rab, and rivals him in popularity. Then there is Ouida's "Dog of Flanders," and the faithful little black dog, "Stickeen," that attached himself to John Muir, the naturalist, during a trip across Alaskan glaciers. Among notable books "Bob, Son of Battle," by Alfred Ollivant, holds a prominent place. Who can ever forget the glorious Bob, the splendor of his silvery tail—and that no less appealing character, "Red Wull," the villain dog of the story? And who can forget Jack London's two epics of dog life—"The Call of the Wild," which tells the story of a civilized dog driven by cruelty back to the primitive state, and "White Fang," which relates how a wild dog became tame. Two other dog stories by Jack London will also be remembered—"Jerry of the Islands" and "Michael, Brother of Jerry." And then there are Mr. Walter Dyer's delightful stories, "Pierrot" and "Gulliver the Great." Three books also deserving the attention of dog lovers are "Dog Stars," by Mrs. T. P. O'Connor, "Dumb-bell of Brookfield," by John Taintor Foote, and "Kazan," by James Oliver Curwood.

★ ★ ★

Aside from fiction, literature is filled with expressions of affectionate appreciation of the dog. A paragraph here, a chapter there, essays and poems, bear testimony to Man's esteem for his most intimate animal friend. We quote in this number Senator Vest's beautiful tribute—also a bit from the Belgian philosopher, Maurice Maeterlinck. Whole books have been made up of selections of this sort. We commend one in particular: "The Dog's Book of Verse," by J. Earl Clauson, which presents a large and varied collection of poems about dogs. In literature, as in life, the dog is everywhere, close at the hand of Man, and secure in Man's heart.

W. D. Moffat

EDITOR

ONE

IRRIGATION, the artificial application of water to produce crops, is as old as agriculture. Genesis 1,17: "A river went out of Eden to water the garden." The practice of irrigation is probably coincident with that of the earliest agriculture of record for the reason that the latter was begun in regions of deficient rainfall in the Old World—Egypt, Assyria, Mesopotamia, Persia, India, Ceylon and China. Evidences abound of the existence of important storage and distribution systems constructed previous to 2000 B. C. Even greater antiquity is ascribed to similar work, the remains of which are found in the valley of the Euphrates, and also in China. The ancient aqueducts and subterranean canals of South America, extending for thousands of miles, once supplied great cities and irrigated immense areas. Irrigation on the Continent of North America was old when Rome was in the glory of its youth. Centuries before the venturous Norseman landed upon the bleak and inhospitable shores of New England a large population dwelt in the hot valleys of the Southwest, in New Mexico and Arizona. From the solid rock, with primitive tools of stone, they cut ditches and hewed the blocks for many chambered palaces, which they erected in the desert or on the limestone ledge of deep river canyons. These voiceless ruins, older than the memory of many centuries, tell the story of a thrifty home-loving and semi-cultured people, concerning whose fate history brings us no word. The long lines of their canals, now choked with the wind-swept drift of centuries, give mute and pathetic evidence of the patience and engineering skill of the builders.

Early in the sixteenth century, when Coronada, the first great American explorer, swept up the Rio Grande Valley in Texas and New Mexico, he found a pastoral race dwelling in pueblos and practicing irrigation as had their forefathers, perhaps as far back as in the days of Abraham.

The priests with the aid of their Indian converts extended the practice of irrigation wherever they established the missions, and introduced many varieties of fruits and vegetables from Spain and Italy.

Irrigation by English-speaking people began in America in 1700, and, for fully a century, was confined to use in the cultivation of rice on narrow strips along the coastal rivers of the Carolinas and Georgia.

The first Americans to reclaim extensive areas in the arid region were the Mormons, who, in 1847, settled on the eastern borders of the Great Interior Basin, on the site of Salt Lake City. Under wise leadership and through community effort, numerous canal systems were constructed and extended to thousands of acres of desert lands.

Between 1862 and 1880 many canal systems were constructed in Colorado, though none was important. The success of the Greeley colony, established in 1870 in the northern part of the State, gave considerable impetus to irrigation all over the arid region.

In the last thirty years there has been an awakening to the opportunity that lies in the arid West for the homemaker, and a remarkable transformation has taken place in many parts of this region. Irrigation canals long enough to girdle the globe three times now distribute the normal flow and the stored water of Western streams to millions of acres, which support hundreds of thousands of contented farmers. Cities, populous and great, have sprung up, rural communities, attractive and prosperous, broad vistas of fertile fields and blossoming orchards have replaced the wastes of sand and sage brush.

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TWO

LOCATING and excavating several of the main canals proved almost as difficult and trying as the building of the big dams. This was especially true in the Yakima and Okanogan valleys in Washington, the St. Mary and Flathead in Montana, Uncompahgre and Grand River in Colorado, and the Utah valley, Utah.

These canals cling to the edges of deep and precipitous canyons, or hug the steep mountain slopes. Here and there huge aqueducts of reinforced concrete span the chasms. For miles the water is siphoned across broad ravines in iron-banded stave pipe, or flows in tunnels through the cliffs.

The Tieton main canal of the Yakima project, Washington, for a distance of twelve miles is through a very rough country. It is cement lined throughout, and for two miles is in tunnels. For the greater part of its length it hugs the side of the canyon, in places 500 feet above the river. The lining for the canal was molded on the river bank, where water, sand, and gravel were available for concrete making, and the forms were carried to the top of the canyon by tram and cableways. The capacity of the canal is 300 cubic feet per second, and it is now irrigating 40,000 acres. The High line Canal of the Strawberry Valley project swings around the steep slopes of the Spanish Peaks of the Wasatch Range in Utah for several miles. At one point a portion of the water is dropped in pipes to the turbines, where power is developed and distributed to several towns in the valley. At various points along its course the canal is covered with a reinforced concrete roof to prevent injury and filling up from avalanches in the spring.

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NOTABLE among the engineering works calling for courage and daring is the Gunnison Tunnel. This great bore, which in a sense changes physical geography, is excavated under the Vernal Mesa in western Colorado. The river portal is in the famous Black Canyon of the Gunnison, a precipitous chasm 3,000 feet deep, and the tunnel extends for nearly six miles, 2,500 feet below the surface of the Mesa. The outlet is in the valley of the Uncompahgre. By means of a low diversion dam, the waters of the Gunnison are turned into the tunnel and transferred to the desert valley of another stream. The early reconnaissance surveys and examinations and the final work of determining the location of the tunnel were attended with unusual dangers. The exploration of the canyon, which up to that time had never been traversed by man, and the careful and detailed preparation of a topographic map of this rugged region called for genuine heroism. In the former task the surveyors risked their lives for many days in the depths of the gorge, and, in the latter, the engineers performed their duties under conditions of great hazard and peril.

The construction forces met and overcame almost every difficulty ever encountered in tunnel excavation. Gas, cave-ins and subterranean springs interposed obstacles throughout the work. At one time a heavy flow of carbon dioxide, or choke damp, forced the workmen to flee for their lives and delayed operations until a ventilating shaft 680 feet deep was sunk. The heavy flows of hot and cold water necessitated the use of large pumps for months at a time. For more than 500 feet the tunnel was driven through a remarkable bed of fossils, consisting of the shells of extinct sea creatures, many of which were of great size. Exposed to the air, disintegration was rapid, and the huge masses of falling rock imperilled the lives of the workmen.

Notwithstanding the extraordinary care of the Government to safeguard the employees, a heavy toll of human lives was taken. The excavation work was projected from four adits, three on the Uncompahgre side and one in the canyon, and crews of drill men and assistants simultaneously began boring into the mountain from both sides. When the last charge of dynamite had been exploded and the tunnel was "holed" through, it was found that the line was true within a fraction of an inch.

Connecting with the outlet of the tunnel is a large cement-lined canal which conveys the water to the valley ten miles below. Here it mingles with the Uncompahgre, and by means of a complex distribution system of canals and laterals, finally reaches the irrigable lands.

The Uncompahgre Valley is one of exceptional scenic beauty, and is blessed with a fertile soil adapted to the growing of a wide variety of products. Its irrigable area is approximately 100,000 acres, more than half of which is now producing two generous harvests.

The discharge of the Uncompahgre River was quite inadequate for the irrigable lands in the valley, which had been brought under the ditches constructed before the passage of the reclamation act, and failure of crops occurred frequently during the low water periods. In addition there were thousands of acres of desert land in the valley doomed to aridity unless the water supply could be supplemented. The Gunnison River, flowing uselessly in its profound canyon on the other side of the range, was drawn upon by means of the tunnel, and an abundance of water is now assured for all the lands included in this project. Agriculture here is exceedingly diversified, and in many sections, is intensive. The products of the soil range include alfalfa, cereals, sugar beets, potatoes, onions, peas, beans, and other vegetables, peaches, pears, and apples. Surrounding the valley are vast areas of fine grazing lands included in national forests, which furnish summer pastures for thousands of cattle and sheep. The rapid settlement of the farm lands has been followed by a corresponding growth of the towns of Montrose, Delta and Olathe.

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FIRST among the imposing structures of the Service in the order of beginning and completion is the Roosevelt Dam, the important engineering feature of the Salt River project in Arizona. Brilliant and daring in its conception, diverse and complicated in its problems, and stupendous in its structural features, the Roosevelt Dam stands today an enduring monument to the creative genius of its designer and builder. The layman will not appreciate the complexity of the problems and the variety of obstacles that were encountered without an understanding of the locality in which the work was carried on. The dam is located in a region which was once regarded as almost inaccessible except to the nomadic Apache, who found a safe refuge here for many years. The nearest railway is 62 miles away. Twenty miles of this distance is across a waterless, parched and forbidding desert. For more than 40 miles the country, gashed and fissured into fantastic forms, a region of stupendous canyons, steep-sided mountains, and turbulent streams, presented an almost insuperable barrier to ingress. It is a region of colorful and inspiring scenery, but most unpromising as a site for a large engineering work. The initial step was to build a highway to the dam-site, a task of much difficulty on account of the rough country and the unwillingness of white laborers to do the work. The road was finally completed, largely by utilizing the Apache Indians, many of whom were remnants of Geronimo's band of marauders. The influence of this experiment in employing Indians has been of lasting benefit to the Red Men of the Southwest, many of whom have continued on similar work for railroads and other corporations. The Roosevelt Road, now familiarly known as the Apache trail, is one of the most spectacular highways in the country, and thousands of tourists go over it each year in automobiles.

The site for the dam was located at the entrance of the profound canyon that Salt River has cut through the mountains. Just above the canyon, Salt River and Tonto Creek converge in a broad, level valley, which is now submerged to a depth of nearly 200 feet, forming one of the largest artificial lakes in the country.

The Roosevelt Dam is of sandstone hewn from the walls of the canyon in which it is built. It is of gravity section, arched up stream, 280 feet high, 168 feet thick at base, and 1,080 feet long on top. At its base it covers an acre of ground. A building 209 feet square and 26 stories high would about cover the space of the dam except that halfway up the sides there would be space for two more structures, each 11 stories high and 885 feet long on top. Owing to the long haul for the railroad the activities of the engineers were varied and numerous. The Government cement mill turned out 600,000 barrels of first-class cement, the sawmill in the National Forest manufactured all the lumber required to house 2,000 people, and for stores, offices, etc.; a hydro-electric plant furnished power to the contractor on the dam and light for the camp; two farms were operated to supply food for the employes; water works and sewerage systems were installed, and law and order were preserved during four years of construction. The engineer had charge also of a large commissary, a big mess, and superintended a brickyard and cement pipe plant.

During the building of the dam the valley below was the scene of unprecedented activity. A million-dollar diversion dam was constructed across the Salt River to divert the stored water into thousands of miles of canals; power plants, pumping plants, transmission lines, and a thousand and one engineering details were completed in advance of the great day when the turbulent floods of Salt River would be conserved and led to the thirsty lands. On March 18, 1911, former President Roosevelt, in the presence of an assemblage of nearly 1,000 people, formally dedicated the structure which fittingly bears his name. By the simple pressure of an electric button the enormous gates weighing 60,000 pounds were raised and released the pent-up floods for irrigating nearly 200,000 acres of Salt River Valley. The swift passing of years has been marked by marvelous progress in this desert valley. In 1902, when the work was started, the assessed valuation of the country, of which the valley is the larger part, was $5,000,000. In 1916, the taxable property values were $72,000,000. In 1913, the first crop census of the project was taken and showed an irrigated acreage of 159,170, and a gross value of crops of $4,775,000. In 1917, the total acreage watered was 201,600; the gross value of crops was $13,692,000. During the same period the number of farms increased from 3,600 to 4,326. The net cost of the entire project to June 30, 1917, including $3,500,000 for the Roosevelt Dam, was $11,367,000. The annual returns from the land irrigated by it are more than $3,000,000 in excess of this amount. The gross value of crops in 1917 was almost equal to that of New Hampshire and Rhode Island in the census year of 1909. In October of 1917 the Roosevelt Dam, canal system, and power plants were formally transferred to the Water Users' Association, under whose management the project henceforth will be operated.

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RECLAIMING THE DESERT

The Highest Dam in the World

FIVE

ARROWROCK dam, in Idaho, is probably the most spectacular structure to the credit of the Service. Completed on October 4, 1915, it ranks all other dams in the world in its height, 350 feet above bedrock. It is of rubble concrete, arch gravity type, and contains 585,130 cubic yards of material. It was built by Government forces, and not by contract, and its completion in two years less than the estimated time and at a saving of more than two million dollars in the estimated cost, furnishes a striking example of Federal efficiency and economy. In connection with this important work the engineers built and operated a standard gauge railway 14 miles long, which carried more than 80,000 passengers, and 14,000,000 tons of freight. A unique camp, containing 4,000 people, was established, with sewerage, water works, and electric lights. Schools for the children of employees, a hospital, postal savings bank, churches, and Y. M. C. A., a large general store and commissary, blacksmith and machine shops, sand-grinding and cement-mixing plants, all under the engineer's direction, gave to the camp the aspect of an enterprising and busy community. It was a camp in which, for four years, there was no night. Throughout the greater part of this period the work proceeded without interruption, night and day, with three eight-hour shifts. Profiting by the experience gained on other large works of the Service, and with labor-saving devices of their own invention, the engineers on Arrowrock worked with extraordinary swiftness and sureness, and established a most enviable record for economy and time. The total cost of the Arrowrock is approximately $5,000,000, and its principal purpose is to conserve the floods of Boise River for the irrigation of 240,000 acres of land embraced in the Boise project.

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SUBURB OF PHOENIX, ARIZONA—RECLAIMED FROM DESERT LAND

SIX

A VEIN of romance runs through every form of human endeavor. No life so sordid, prosaic, or wretched, but has felt sometime its light and gladsome touch. In the desert, romance finds its chief essentials in adventure, courage, daring and self-sacrifice. For more than half a century man has been writing a romance of compelling interest upon the face of the dusty earth. Irrigation, with Midas' touch, has changed the desert's frown to smiling vistas of verdure. Its solemn silence has been broken by the voices of countless happy people.

Our national strength is in its citizens, and the place in which the best is bred is in the country. The threat of urban congestion, no longer remote, and the pressure of population, which even now is bearing heavily upon our resources, are unanswerable arguments for increasing and making permanent the nation's virility, prosperity and growth by creating more country homes.

It is an economic axiom that the stability of a nation is assured only when the bulk of its citizens reside in their own homes. The ideals and principles for which our forefathers fought cannot be preserved and maintained by a citizenry whose interest does not extend beyond mere wage earning. The American desert was won by war, treaty, discovery and purchase. Flying at one time the flags of four nations, its history is rich in thrilling incident and adventure. Its milestones are the bones of trappers, explorers, and pioneers. Its people are strong and courageous. To battle with the elemental forces of nature has become a passion. While the glamor of romance in years agone is dispelled, it is still romance-land, but with a new background. The romance of creation now pervades the once silent desert, and the dominant thought and impulse is to establish there the well ordered life of New England with all the highly organized facilities for making existence in the country attractive.

American people cannot rightly claim to have measured up to their opportunity until the deserts of the West and the swamp lands of the South have been replaced by vistas of prosperous farmsteads.

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SERIAL NUMBER 165

RECLAIMING THE DESERT

By C. J. BLANCHARD
United States Reclamation Service

With Illustrations from Photographs Supplied by the United States Reclamation Service.

MENTOR GRAVURES

A MIRACLE OF IRRIGATION, UNCOMPAHGRE VALLEY, COLORADO

HIGH LINE CANAL, UTAH VALLEY, UTAH

GUNNISON TUNNEL, COLORADO

MAKING FURROWS FOR IRRIGATION

MENTOR GRAVURES

ROOSEVELT DAM, ARIZONA

ARROWROCK DAM, IDAHO

SUBURB OF PHOENIX, ARIZONA

"It is a grander achievement to expand the domain of civilization by water than by blood."

NATIONAL reclamation was the dream of Western statesmen and thinkers for a quarter of a century before a laggard Congress gave it form and actuality by the law of June 17, 1902. With the passage of that law and another which initiated the construction of the Panama Canal,—both were signed by President Roosevelt in the same month,—the engineering forces of the nation were flung into widely differing fields of activity. With the Panama Canal engineers, the task, though herculean, was confined to a restricted and perfectly well defined area. On the other hand, the Reclamation problems were generally in regions widely separated, remote from transportation, and often unsurveyed and unexplored. To appreciate the variety and magnitude of the tasks involved, it is necessary briefly to describe the general character of the country in which these works were projected.

The Desert States

The great American desert may be roughly described as lying between the western boundary of the Mississippi Valley and the Pacific Ocean, and as embracing about two-fifths of the total area of continental United

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THE FIRST FLOW OF WATER
In Grand Valley Project, Colorado

States, exclusive of Alaska. The superficial area of the several states that comprise this desert is almost equal to the combined areas of Norway, Sweden, Denmark, Holland, Germany, Belgium, France, Italy, the British Isles, Austro-Hungary, Spain, Portugal, the Balkan States, Turkey in Europe, and Japan. The population of the so-called desert states* is 16,423,625, while that of the countries above-mentioned is over twelve times as great. Within the confines of the desert is every gradation of climate from north temperate to semi-tropic found in these European countries. Its physical geography includes a wide variety of features from the Great Plains to the highest and lowest elevations in our country. Herein are found the most notable scenic attractions, including the great national playgrounds of Yellowstone, Glacier, Rocky Mountain, Mount Rainier, Crater Lake and Yosemite National Parks, the Grand Canyon of Arizona, and the principal national forests.

As to water supply, the desert belongs in two regions, arid and semi-arid. West of the Missouri and extending to the foot of the Rocky Mountains, is a vast area of foothills and gently sloping, grassy prairies, which constitute a large part of the semi-arid or sub-humid region of the United States. This broad belt, stretching from Mexico northward into Canada, has no clear-cut boundary separating it from the humid region on the east or the arid region on the west, owing to the variance of the mean annual precipitation in many localities. A convenient and easily marked line for the eastern boundary of the arid region is one closely following the hundred and third meridian. On the north it bends away from the meridian toward the west, and on the south tends eastward north of the Rio Grande. On the west the arid region extends to the Pacific Coast in extreme southern California, but from Monterey north there is a narrow belt of semi-arid and humid country bordering the Pacific Ocean. The Coast Range is humid, especially in Oregon and Washington, where the rainfall is as heavy as in any other part of the United States.

FORTY BUSHELS OF WHEAT PER ACRE
Shoshone Project, Wyoming. This was desert land in 1915

The true desert, wherein the pro-

*Arizona, New Mexico, California, Oregon, Washington, Nevada, Utah, Idaho, Montana, Colorado, Kansas, Nebraska, North and South Dakota, Oklahoma.

duction of crops is wholly dependent upon the artificial application of water, lies for the most part west of the Rocky Mountains. Its estimated area, 900,000 square miles, is probably slightly greater than that of the semi-arid region. An accurate determination of the relative size of each, however, is not possible until a comprehensive hydrographic survey has been completed. Contrary to popular opinion, this region is not a vast wilderness, desolate and unpromising. Between the mountain ranges lie many beautiful valleys, through which flow numerous streams fed by melting snows. Utah and Nevada contain large areas of sage-brush desert, comprising what is known as the Great Basin, which has no outlet to the sea, and is doomed to aridity by reason of the absence of living streams. Millions of acres of desert now inhabited by the coyote and the rattlesnake await only the coming of the engineer to wake to teeming fecundity.

In one important respect the arid and semi-arid regions are alike, and that is in the character of the streams. Almost without exception the rivers of the West are erratic and "flashy" in flow, are subject to long periods of drouth and sudden and destructive floods. The full utilization of these streams for irrigation and power necessitates storage. In the control of floods, engineers have found their greatest problem, and one whose solution has taxed the skill, imagination and daring of twentieth-century genius.

WHEAT ON SHOSHONE PROJECT, WYOMING
This land was desert in 1908

National Irrigation

National irrigation became a fixed policy of the American Government with the passage of the Reclamation Act in June, 1902. The principal provisions of this act are briefly as follows:

First. A reclamation fund in the Treasury consisting of the proceeds from the sales of public lands in the sixteen arid and semi-arid states.*

Second. A Reclamation Service in the Department of the Interior to investigate and report on the irrigation projects to the Secretary of the Interior, who, with the approval of Congress, may authorize construction and let contracts, providing the

SAGE BRUSH AND ALFALFA, MINIDOKA PROJECT, IDAHO
On one side of the fence is the desert sage brush, on the other rich alfalfa

*These include the states named in the first foot-note, with Texas added.

money is available in the fund.

Third. The return to the fund of the actual cost of each project by the sale of water rights, payments to be made in a series of instalments running over a period of twenty years without interest. The money so returned is to be used again and again on other works.

Fourth. The holding of public lands for actual settlers under the homestead act in small farm units sufficient to support a family.

Fifth. The sale of water rights to private land owners, but not for more than 160 acres.

A COMFORTABLE "DESERT" HOME
Having electric power for heat, light and cooking

Sixth. The ultimate turning over to the people of the irrigation system, to be operated and managed by them under a system of home rule.

The policy of national irrigation is broadly paternal and of enormous economic importance to the whole country. In the building of new commonwealths in the arid West the Government is utilizing its own undeveloped resources. It is creating opportunities for its citizens to establish themselves in permanent homes in which patriotism, loyalty and civic pride are bred and fostered. For a number of years the growth of population has been abnormal when compared with the development of the agricultural industries that must support the people. Farming as a profession has been languishing and falling behind the general development of the country. The rapid increase in land values has made it correspondingly more difficult for the man of small means to acquire a foothold on the land. Practically every progressive nation in the world has come to recognize this fact, and is making provisions to encourage and assist its citizens to undertake farming. The primary purpose of the Reclamation Law, therefore, is to make homes on the land. To the new empire in the West have flocked the young, the strong, the adventurous, and herein we are witnessing a gradual welding of all the Aryan races into a final race type. Signs are not lacking that this type in time will dominate the world, for the desert offers to every man his true birthright—room to breathe, sunshine, a sure reward for intelligent labor, the individual home, and an opportunity to become independent. Desert

HIGH SCHOOL BUILDING, MINIDOKA PROJECT
This beautiful, fully equipped school stands where there was only desert in 1907

reclamation already has gone beyond the stage of prophecy. The material and substantial results that have been accomplished place the work of the Government on a practical and solid foundation.

The Romance of Reclamation

The history of national reclamation is as interesting and romantic as a tale from the Arabian Nights. Romance colored the vision of builders that saw in the sparkling streamlets, the unchecked floods, the wide, free plains and the vacant mountain valleys a promise of independence, happy homes and laughing children. Theirs was not the incentive of large emoluments, for Government salaries are notoriously meager. Their inspiration came from doing a signal work of splendid usefulness,—conquering nature in her unfriendliest mood for the permanent and lasting good of mankind. As they toiled in the fastnesses of the mountains, in abysmal canyons or far out in the voiceless desert, through the blazing summer heat of the Southwest or the fierce blizzards of the northern plains, this thought was uppermost, "By this work we shall make the desert blossom."

CHICKENS THRIVE
In the dry climate of the desert

Their dramatic achievements stand out boldly in this age of engineering triumphs. The mighty floods of western rivers have been checked behind enormous masonry dams, several of which are ranked among the highest in the world. Physical geography has been altered by transferring rivers from one drainage basin into that of another. Whole rivers are now flowing through tunnels that pierce lofty mountain ranges, and the water is being distributed in thousands of miles of canals to a million acres of desert.

Owing to limitation of space only a few of these interesting irrigation projects of the United States Federal Government are here mentioned, although each is worthy of extended description. The annual reports of the Service are obtainable from the Superintendent of Public Documents in Washington, and these contain full details.

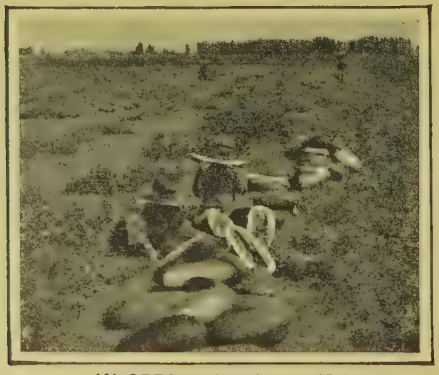
In the order of their magnitude and the spectacular character of the engineering work, the Arrowrock dam in Idaho, Elephant Butte dam in New Mexico, Roosevelt dam in Arizona, Shoshone and Pathfinder dams in Wyoming, and Gunnison tunnel in Colorado, take first rank. Several of these are described at length elsewhere.

The Most Capacious Irrigation Reservoir

In a region rich in thrilling reminiscence along the pathway trod by the Conquistadores of Spain, Federal engineers recently completed a

FIRST SETTLERS ON DESERT LANDS
Settlers' houses where once was the haunt of the buffalo

monumental structure of masonry known as the Elephant Butte dam in New Mexico. This enormous mass of rock and cement effectually and permanently blocks the canyon of the Rio Grande just below the isolated basaltic peak from which it derives its name. It rises from the depths of the canyon 318 feet, and its crest length is 1674 feet. It owes its place among the greatest structures of the age to the enormous capacity of the reservoir created by it. Behind this towering monolith the greatest floods of the turbulent Rio Grande are held in a lake forty-five miles long and four miles wide. When full it will contain enough water to cover 2,627,700 acres to the depth of a foot, or sufficient to submerge the entire State of Connecticut ten inches deep. This stored water, when needed for irrigation, is turned back into the river and taken out at several points above and below El Paso, Texas; 180,000 acres in New Mexico, Texas and Old Mexico are being brought into cultivation. The charm of antiquity pervades the whole region. Here irrigation was practiced long before the first written word of our history. Centuries before the coming of the Spanish missionaries, a pastoral race dwelt here and cultivated this fertile valley along the stream. A later civilization merely absorbed and extended the primitive canals until the era of national reclamation aroused the valley to new life and purpose. While some of the primitive methods of agriculture, differing but slightly from those of Biblical days, are still practiced, modern harvesting machinery is replacing the hand sickle, the sulky plow supplants the sharpened stick, and the threshing of grain is now performed by modern methods, and rarely by means of goats and ponies. Splendid highways of concrete and macadam connect the farming communities with numerous thriving towns, and the quaint groups of adobe houses, which here and there rise in the desert, are



AN OREGON MELON PATCH

SIX YEARS FROM DESERT LAND
A rich and fruitful farm on land barren in 1912

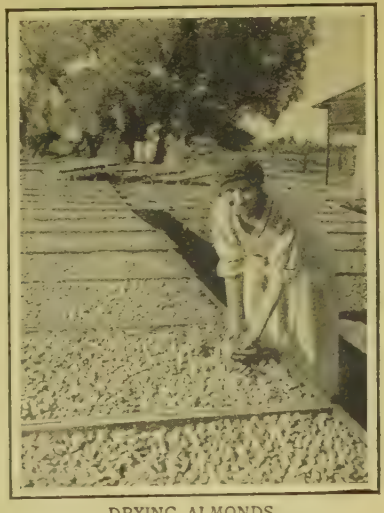
the last remains of vanishing races that are slowly giving way to modern progress.

The Shoshone Dam

In northern Wyoming, near the eastern entrance to Yellowstone National Park, the South and North Forks of Shoshone River plunge downward from the steep slopes of the Rockies and unite in a broad level-floored valley which in early geological times was a beautiful mountain lake. At the lower end of the valley the river rushes abruptly into a deep and narrow canyon. The entrance to the canyon, which is only sixty feet wide at the bottom, was selected as the site for the Shoshone dam. Before construction began it was necessary to blast a highway through the gorge for a distance of eight miles, in order to connect the work with the nearest railway. This highway is now a part of the road system into the Park, and is known as Cody Way.

Nearly a year was spent in investigating bed rock conditions before the foundation was placed. Enormous boulders eighty feet in thickness were discovered in the bed of the stream; the removal of these, owing to the narrowness and depth of the canyon, proved expensive and difficult. Before any work was undertaken in clearing the channel of obstructions, the river was passed around the dam site by means of a tunnel. During the early period of construction the laborers were taken to and from their work, hundreds of feet below the camp, by means of baskets, and skips were suspended on cable ways across the gorge. Sudden floods, extreme cold weather, short seasons, and other unfavorable conditions greatly retarded progress.

The dam is a wedge of concrete, with curve up stream, 328 feet in height, and 200 feet long on top. It has restored the lake of olden times, and this beautiful body of water is now one of the attractions of the trip to the Park. The stored water will be utilized



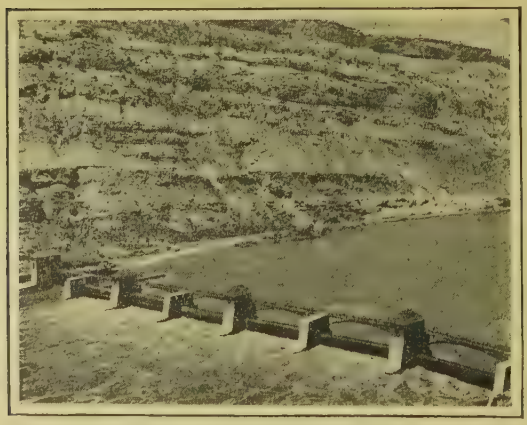
DRYING ALMONDS
On the Orland Project, California

for the irrigation of 150,000 acres of land on the mesa (a high, broad, flat table-land) below Cody. This region until 1907 was a worthless and uninhabited desert. Today it is occupied by more than 700 farm families and three growing towns.

LAGUNA DAM, ARIZONA-CALIFORNIA
Length, 4781 feet; 19 feet high. Division Gates, 17x33 feet, are the largest in the world

Conquering the American Nile

The delta of the Colorado River, in Arizona and California, is often described as America's Valley of the Nile. In climate, soil and agricultural conditions it is singularly like the great valley of Egypt. The conquest of this turbulent river of the West was a splendid achievement. The engineering features of the Yuma project, in Arizona and California, are in many respects original. The control of the stream called for a long diversion dam and more than 100 miles of strong levees. The dam is nearly a mile long, nineteen feet high, and 267 feet wide on the bottom. Its type is similar to that of the barrages of the English engineers in India. Laid on a foundation of shifting sand and silt, it is held in place by its enormous weight, 600,000 tons. Owing to the quantities of silt carried by this stream, the dam is provided with a large settling basin, sluiceway and gates, by which comparatively clear water is turned into the canals. The main canal system extends for twelve miles on the California side. Just opposite the city of Yuma, Arizona, the entire volume, 1,000 cubic feet per second, is dropped in a siphon 1,000 feet long and carried under the river to the Arizona side. Here are 90,000 acres of valley and mesa land, and more than half of the area is being developed intensively. The soil is of great depth and extremely fertile, and the climate is adapted to the growing of a wide variety of crops. The mesa lands which are to be opened later are described as frostless, and especially adapted to growing citrus and other semi-tropic crops.



GRAND RIVER, ROLLER-TOP DIVISION DAM, COLORADO
Electrically operated rollers are lifted to pass the floods

The Pathfinder Dam

Far from the beaten path of man, fifty miles from the nearest railway in a deep and narrow granite canyon of the North Platte River, in southern Wyoming,

engineers in 1903 located an admirable site for a high masonry dam. Early maps of the expedition of Gen. John C. Frémont, the explorer, indicated the spot as the scene of a disaster where these adventurers suffered the wreck of their boats and the loss of many belongings in the rapids of the river. Hence the name Pathfinder dam. This is a beautiful structure of huge granite blocks 225 feet high and 600 feet long on top, and its cost was $1,000,000.

Judged from the service it has rendered mankind already, as a preventive against disastrous floods and a guarantor of generous harvests, it deserves a high place among the storage structures of the world. Since its completion the North Platte River has been completely tamed, and angry floods that once wrought millions of dollars of destruction are now so distributed as to insure an annual harvest valued at $6,000,000 in a region once occupied only by nomadic herdsmen.

SHOSHONE RESERVOIR, WYOMING

Transferring a River

The waters of the Strawberry River in Utah, which for ages flowed idly to the Pacific Ocean, are today contributing to the material prosperity of a beautiful valley in the drainage of Great Salt Lake. The transferrence of a river from its own drainage into that of another has been performed by the Federal engineers on several occasions, notably in Colorado, where the Gunnison River is augmenting the flow of the Uncompahgre, the St. Mary River in Montana (a former tributary of the Arctic Ocean, now transferred to Atlantic drainage) and the Truckee River in Nevada, now consolidated with the Carson River.

Strawberry Valley, Utah, in the heart of the lofty Wasatch Range, has been converted into a large lake by means of a dam in Strawberry River. The stored waters are turned through a tunnel four miles long, piercing the range, and dropped into Utah Valley on the Western slope. By means of sixty miles of cement-lined canals skirting the mountains, an area of 60,000 acres of excellent agricultural land has been reclaimed. The

PATHFINDER DAM, WYOMING

218 feet high, 600 feet long at top. Irrigates 220,000 acres; cost, $1,000,000

downward rush of water has been harnessed, and the surplus power developed is leased to several of the towns in the valley.

ELEPHANT BUTTE DAM, NEW MEXICO
Height, 318 feet; length at top, 1674 feet. Creates largest artificial reservoir for irrigation in the world

Reclamation Past and Future

Fifteen years have passed since reclamation became a Federal policy,—a short period in a nation's life if measured only in time, but one of historic importance when measured by achievement and progress. In this brief span of years the Service has completed sixteen notable structures of masonry and concrete, controlling the floods of torrential streams, has excavated more than 10,000 miles of canals, many of which carry whole rivers, and seventy miles of tunnels, mostly in mountains. It has to its credit the highest dam, the longest tunnel and the largest storage reservoir for irrigation in the world. By an investment of $120,000,000, which is repayable by the farmers in twenty years, the productive territory of the nation has been expanded by more than a million acres, and there has resulted an annual increase in its food supply valued at $50,000,000. Where once the wilderness reigned, the hearth-stones of 200,000 people have been erected, and a citizenship established which constitutes a new bulwark of American liberty, and bulkhead the flood waters of anarchy. Thrilling, dynamic, and inspirational, this work quickens patriotic impulses and stimulates love for the republic that has promoted it.

OUTLET OF THE STRAWBERRY VALLEY TUNNEL
Four miles long, and connecting Pacific Ocean drainage with that of our great interior basin

Reclamation Plans

The plans of the Reclamation Service for the present and for the immediate future are centered upon the completion of twenty-six projects, embracing a total of 3,118,000 acres. To date, engineering works have made available an adequate water supply for approximately 1,800,000 acres. In 1917, water was applied to about 1,200,000 acres, and the gross value of crops was nearly $60,000,000. It is conservative to state that with the irrigation of all the lands

THE NEW HOME ON THE DESERT

included in these projects, 50,000 families will have been established on individual farms. The taxable wealth will be augmented by $300,000,000, and our annual returns from crops increased by $100,000,000. The area included in these projects exceeds the total cropped acreage of Connecticut, Vermont, Massachusetts, Rhode Island and Delaware, and the estimated value of crops after reclamation is $20,000,000 greater than the total returns per annum of these states. In these estimates no account is taken of the important increment to our national wealth in the resulting growth of cities and towns, in the building of railroads, and in manufacturing and commercial institutions, which in aggregate usually equals that of land values.

In fulfilling its manifest destiny, the West has undertaken the greatest and most splendid enterprise in the world—the upbuilding of Man. It is doing for the world what the world needs most. It is producing a great people. The sentiment of it has been expressed in eloquent terms by the late Henry Grady, "A citizen," he said, "standing in the doorway of his home, contented on his own threshold, his family gathered about him, while the evening of a well-spent day closes in scenes that are dearest,—he shall save the republic when the drum tap is futile and the barracks are deserted." This pregnant sentence epitomizes the final chapter of our Romance of the Desert, as it is now being written in the arid West.

PRODUCTS OF THE DESERT

SUPPLEMENTARY READING

RECLAIMING THE ARID WEST
By George Wharton James

UNCLE SAM'S OUTDOOR MAGIC
By P. K. Fitzhugh

DOCUMENTS ISSUED BY THE U. S. RECLAMATION SERVICE AND DEPARTMENT OF AGRICULTURE.

*** Information concerning the above books may be had on application to the Editor of The Mentor.

On reading Mr. Blanchard's account of the work of reclaiming the desert for the people, the natural question that arises in the reader's mind is, "How does one get a government farm and what are the expenses involved?" Anticipating this question, I obtained information from Mr. Blanchard in reply to it. Getting a farm is comparatively a simple proposition. Making good on it is quite another matter. In the first instance, the Government has made the way easy and inexpensive. Any citizen of the United States who has not used his homestead right is qualified to make a filing on any surveyed public lands not withdrawn from entry.

★ ★ ★

The procedure is about as follows. After a personal inspection of the vacant land desired for a home, the homeseeker makes application to the proper local Land Office or Land Commissioner and deposits filing fees of $8 for an 80-acre or $16 for a 160-acre tract. If the entry is made on an irrigation project, usually he must pay, in addition to the above, five per cent of the building charge, and, when due, the annual charge for operation and maintenance. On the projects containing lands now open to entry, the building charge ranges from $30 to $75 per acre, and is payable in twenty years without interest. The charge for operation and maintenance averages about $1.50 per acre, and is payable annually. This charge will vary on the different projects and according to the amount of water used. Summing up the initial cost of obtaining a Government irrigated farm of 40 acres, the settler will find it necessary to expend $6.50 for filing fees; if the construction charge is $50 per acre, he will pay $100 for the first instalment and, when due, about $60 for the operation and maintenance assessment—a total of approximately $166.50.

In the second, third, fourth and fifth years following, the only payments required are the annual charges for operation and maintenance, about $60. Thus in five years the settler is obliged to pay to the Government approximately $406.50.

The balance of the unpaid construction charges are payable in fifteen annual instalments, beginning on December 1 of the fifth year, the first five of which are each 5 per cent and the remaining ten 7 per cent of the construction charge, without interest for the deferred payments.

The Secretary of the Interior is authorized to require the reclamation for agricultural purposes and the cultivation of one-fourth of the irrigable area within three full irrigation seasons, and of one-half of the irrigable area within five full seasons. Actual residence, covering a period of three years, is obligatory.

On the basis of a construction charge of $50 per acre, and an annual operation and maintenance charge of $1.50 per acre, the entire investment of the settler at the end of the twenty years' term will be as follows:

Filing fees	$6.50
Construction charges	2,000.00
Operation assessments	1,700.00
Total	$3,706.50

For a farm on public lands outside of an irrigation project the only payment required is the filing fee at the time of entry.

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How much capital should a man have to take up an irrigated farm? It is extremely difficult to answer this question. Experience has shown that success depends about 75 per cent on the individual. The chief requisites for success may be stated as *energy*, *business ability*, *judgment*, *capital* and *experience*. Experience has been placed last for the reason that it has been shown repeatedly that experience in farming in humid regions is not a particularly valuable asset in irrigated farming.

It may, therefore, be said that the average man who takes up a Government irrigated farm of 40 acres should possess a capital of at least $2,500, and not less than $4,000 if he undertakes to subdue an 80-acre tract.

★ ★ ★

As we ride on the overland trains across the great desert stretches of the far West, our eyes are fed full of color. In the midst of the riot of rich tints, we turn eagerly to occasional green spots that relieve the blazing beauty of the landscape, and our glances linger there with a sense of rest. These green spots are desert farms—fresh oases where, under the spell of water, the soil is wakening from its centuries of slumber and yielding up its stored wealth. These desert farms make a strong, human appeal to the passing traveler. They tell an assuring story of man's return to the soil and of rich returns from the soil—a story of well-being and content attained, in substantial, comfortable homes. In some such modest way as pictured on the preceding page the settler begins his conquest of the desert. The measure of his success and prosperity lies in his hands. The wealth is there ready to be harvested.

W. D. Moffat

EDITOR

GUYNEMER, WHEN HE BEGAN HIS FLIGHTS

GUYNEMER, THE WINGÈD SWORD OF FRANCE

His Ancestry and Childhood

ONE

NOT only modern, but ancient French records glorify the name of Cuynemer. In the time of Roland and Charlemagne, there was a Guinemer that performed noble deeds. An eleventh-century history of the Crusades extols the name of a Guinemer of Boulogne. The Treaty of Guérande, which terminated in 1365 a war of succession in Brittany, bore the signature of Geoffroy Guinemer among thirty knightly signers. In 1464 the old and honorable name was first spelled with a *y* by Yvon Guynemer, a man of arms in the service of his country.

Bernard Guynemer, great grandfather of Georges, was an instructor in jurisprudence in Paris during the Revolution, and was later made president of the Tribunal of Mayence. A son, Auguste, who lived to be ninety-three, left to posterity a remarkable collection of memoirs of the Revolution, the Empire, and the Restoration. One of his brothers, an officer in Napoleon's army, was killed at the siege of Vilna in 1812; another, a naval officer, died of wounds received at Trafalgar. A fourth brother named Achille became the grandfather of Georges, and it was his exploits, among all the tales of his forbears, that the youthful grandson loved best to read about. One venturous anecdote of the child Achille became part of family history, and in its revelation of mature purpose and utter poise under confounding circumstances recalls instances of the boyhood of the future Ace of Aces. When the small Achille arrived one morning at his school in Paris he found it closed. The mistress, he was told, had been taken away, summoned before the Revolutionary Tribunal. When he inquired where this Tribunal was, he was laughingly informed; and straightway he set out to find it. When the eight-year-old appeared in the court room alone, he was received by assembly and judges with amazement, then with raillery, but, in no wise disconcerted, he continued up the imposing aisle to the place where the mighty Robespierre sat. Humorously, Robespierre met his request that his teacher be allowed to return to her classes by remarking that the child's need of her could not be great, as doubtless she had taught him little in the past. In his desire to refute the injustice, the boy begged permission to recite his lessons for the day. When he had finished, Robespierre impulsively took him in his arms and embraced him. Then he gave into his charge the school mistress, and permitted them both to depart.

Seven years later, Achille Guynemer was a volunteer in the army that invaded Spain. In 1812, he was taken prisoner; later he escaped, and in 1813, at the age of twenty-one, he was decorated with the Cross of the Legion of Honor. His grandson, who strongly resembled his early portraits, received the same honor when he was a few months younger.

Of the four sons of the president of the Tribunal of Mayence, only one, Achille, had descendants. The son of the latter was Paul Guynemer, a French army officer and military historian, and his only son was Georges, the young chieftain of the sky.

Even as a very little boy, Georges carried his head with pride and set his ambitions high. Adored by his mother and sisters, he was a constant object of solicitude because of ill health. When he was of school age he received instruction from the governess of his sisters. Very young he showed evidences of those qualities of honor, truth and bravery that earned him in later years all the honors France could bestow. Very young he fell under the spell of Joan of Arc, she who was wounded in Compiègne, the home of his boyhood, and he clamored for stories of her and of others of his country's warriors.

An indifferent pupil in the grammar-school at Compiègne, he was placed in Stanislas Military College, his father's Alma Mater. A group photograph of the students represents Georges as a boy of twelve, pale, thin, with dark, wilful eyes lighted by smouldering fires of dream and ambition. As a student he was quick and intelligent, but he was mischievous and headstrong under discipline. In play he preferred warlike games, and invariably chose parts that gave him opportunities to attack, which he did with agility and vigor, often to the discomfiture of older opponents. One of his teachers wrote a sketch of his school-boyhood that betrays many outstanding traits of the Guynemer of the future. In playground battles he had no desire to command; he liked above all to fight, and to fight alone. He attacked the strongest, without consideration for any advantage they might have of weight, height or numbers. Even as a boy, he excelled by adroitness, suppleness of maneuver, and will-to-win.

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GUYNEMER AND HIS FAITHFUL GUNNER, GUERDER

GUYNEMER, THE WINGÈD SWORD OF FRANCE

His Youth and Apprenticeship

TWO

THOUGH hampered by illness and enforced vacations, Guynemer graduated from Stanislas College in his fifteenth year with honors. In the autumn he re-entered the school for a further course of study. His leisure hours were passed installing miniature telephones, and experimenting with paper airplane models. His ability for invention and mechanics was marked. All the sciences held interest for him, but he had special liking for chemistry and mathematics. He was fond of reading, but his choice of books fell solely on those that dealt with war, chivalry and adventure.

One of young Guynemer's intimates was Jean Krebs, whose father was a pioneer in the development of aerostatics and aviation. He was then director of the great Panhard automobile works, and on Sundays the two youths spent hours studying motor parts. With their fellow students at the college they were often taken to visit technical establishments after school. Georges was always to be found beside the one that explained the operations of the machinery. When they were permitted to attend automobile and airplane exhibitions, his delight was boundless. Keen, excited, agitated, he passed from one exhibit to another, commenting, interrogating, and incidentally filling his pockets with catalogues and pamphlets about the different makes of cars and planes. While still at school he fashioned a small airplane, which he launched with glee over the heads of his companions.

At that time (1910), the eyes of Europe were on the sky. Blériot had crossed the Channel; Paulhan had soared to a record height of over four thousand feet. It was the ambition of all French youth to fly. With Guynemer the desire was an obsession. From the aerodrome near Compiègne he secretly made his first flight, crouched behind an obliging pilot, cramped and uncomfortable, but ecstatically happy. So determined was he to follow the profession of the air that pleasures of world travel, enjoyed for months in the fond companionship of his mother and sisters, served in no way to distract him from his purpose. "What career shall you adopt?" his father inquired, when they returned. And Georges answered, as if it were the most natural thing in the world, "I shall be an aviator." His parent protested that aviation was not a career, but a sport. The boy was obstinate. He confessed that his life was already dedicated to this passion. That on the morning he had first seen a birdman fly above the college of Stanislas, he had been possessed by a sensation he could not explain. "I felt an emotion so deep it seemed sacred," he told his father. "I knew then that I must ask you to let me become an aviator."

Refused admission to the *École Polytechnique* because the professors believed him too frail to finish the courses, he was taken with his family to Biarritz on the coast of France, and there rumors came to them of the war, in the month of July, 1914. War was declared August second. The following day Georges presented himself for medical examination at Bayonne, —was rejected, and when he tried still other times, was rejected again. Finally his persistence, his devotion to France, his resolve to serve her in the way he felt he could be of the most value, won him the reward of acceptance in the training school at Pau.

In January, 1915, Guynemer received his first lessons as a student-aviator, after having studied two months as a mechanic. On February first, according to his own narrative, his apprenticeship as a pilot took on aerial character. "I drove a 'taxi,' and then the following week I mounted an airplane, going in straight lines, turning and gliding, and on March tenth I made two flights lasting twenty minutes in daylight. At last I had found my wings. I passed the examination the next day."

Once, Guynemer barely escaped being scratched from the list of military aviators at the school of Avord, because a head pilot complained that he was imprudent in making flights that were too difficult for one of his experience, and because he persisted in flying when the weather was unfavorable.

When he had flown for six months, he was sent one day on a photographing mission. The enemy discovered him. A rain of shells fell on his plane. Keeping on amid the deluge, Guynemer made not a single turn to escape the attacks. For an hour he went straight toward his objective until his observer gave the signal to return. Even then the pilot continued to drive on toward the guns that were trying to beat him down, and, handing his personal photographic apparatus to his companion, asked him to take some pictures of the mortar attacking the airplane. From that day, no one in the squadron doubted the future of this youth, "this eagle of the birdmen, this young Frenchman with the face of a woman and the heart of a lion."

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GUYNEMER AT THE WHEEL

GUYNEMER, THE WINGÈD SWORD OF FRANCE

Pioneer Airmen in France

THREE

FERNAND FOREST, a countryman of Guynemer's invented, thirty years ago, an explosion motor whose operations formed the basis of many subsequent experiments in petrol engines. And it was a Frenchman, Clement Ader, who was the first to fly with a motor-driven flying machine. For a time Ader experimented under the patronage of the French Ministry of War, but he was eventually deprived of Governmental sanction and assistance because he was deemed visionary, and his inventions impractical. However, the machine in which he made several flights in the year 1897, the "Avion," was later one of the treasured exhibits of the first Aeronautical Salon, and was placed beside the airplanes of Wilbur Wright, Delagrange and Blériot "as convincing proof that to France belonged the honor of making the first flying machine." It is related that when Ader first found himself leaving the ground for a test flight, "he was so taken by surprise that he nearly lost his senses."

Charles C. Turner, author of "Marvels of Aviation," narrates the early adventures of Alberto Santos-Dumont, the rich young Brazilian who arrived in Paris in 1898 for the purpose of having a navigable balloon made there. Already the name Zeppelin had received passing notice in French and English newspapers, but most people refused to believe reports of his inventions, and those of Santos-Dumont, concluding that they were both mad. Santos-Dumont, "the man who initiated the modern airship movement in France and made the first officially observed airplane flight in Europe," flew around the Eiffel Tower and over the roofs and treetops of startled Paris in his small spherical balloons, propelled by gasoline motor, and in 1902 made flights over the Mediterranean. In Paris he built the first airship station ever constructed. In 1903, his maneuvers above the French army review of July fourteenth led to negotiations with the French Minister of War, to whom the young Brazilian made the offer "to put his aerial fleet at the disposition of France in case of hostilities with any country except the two Americas." He explained, "It is in France that I have met with all my encouragement; in France and with French material I made all my experiments. I excepted the two Americas because I am an American."

Santos-Dumont, who had astounded the world by the success of his airship experiments, was also the pioneer aviator in France, when he became convinced of the practicality of the heavier-than-air machine. When Delagrange, Blériot and the Wright brothers leapt into fame, Santos-Dumont continued quietly to study and contrive, and in 1909 he brought out the "Demoiselle," a small airplane on whose design he claimed no patent rights, offering it to the world as a gift of his invention.

Between the years 1907 and 1910 many unknown inventors and mechanics won renown through their aerial accomplishments. Outbursts of fervor greeted every fresh success in air endeavor. On wings the patriotism of France soared to heights of exaltation. Lethargy gave way to enthusiasm. Voisin, Blériot, Delagrange, Latham, Paulhan, Védrines became national heroes. If a popular aviator flew a winning race, crowds attended his steps and surrounded his hotel. If one was injured, a sympathetic assembly gathered outside the hospital where he lay, and extras were issued by the daily journals as to his condition. Annual airplane meets and exhibitions had the patronage of the French Government. Experts were constantly occupied in making mechanical improvements in the motor, steering gear and wings of the wondrous new machines that had intrigued the imagination, the very soul of awakened France.

Though France owes a debt to American inventors, always generously acknowledged, French aviators quickly attained supremacy on the continent. When the war came, the country was already dotted with aerodromes and airplane factories, and hundreds of trained aviators and mechanicians were ready to take the air for their beloved France.

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GUYNEMER BROUGHT DOWN BY A BOCHE, BUT WITHIN FRENCH LINES

GUYNEMER, THE WINGÈD SWORD OF FRANCE

The Flying Storks

FOUR

AT the time of Guynemer's death he was commander of the Flying Storks, a squadron of high-record fighting aviators whose feats have for over three years been the sensation of the Allied front. The original membership comprised ten pilots, some of whom had already attained national renown. Approximately fifty warriors that have carried its emblem down the highways of the air have been killed, wounded, or reported missing. Three squadron chiefs, Captain Auger, Lieutenant Peretti and Captain Guynemer, have fallen in aerial battles; three other chiefs have been gravely wounded—Commandant Brocard, Captain Heurteaux and Lieutenant Duellin. The prowess of The Storks may be gauged by the statement that fourteen members of this famous escadrille, (only one of ten score flying organizations attached to the French army), brought down a third of all the German planes destroyed before January, 1918, or two hundred in less than three years. This is the official count. Many more enemy planes met defeat from their guns, but without the required number of official witnesses.

"Les Cicognes" (The Storks) were organized in April, 1915, by Commandant Brocard, now retired from active fighting. The first machine adopted by the corps was the Nieuport-3, on whose side was painted a stork with spread wings. In 1917, Spad models supplanted the Nieuports in the service of The Storks.

The official records of a dozen Aces of the squadron are given: Captain Guynemer, 53 enemy planes downed; Lieutenant René Dormé, 24; Captain Alfred Heurteaux, 21; Lieutenant Duellin, 19; Captain Armand Pinsard, 16; Lieutenant Jean Caput, 15; Lieutenant Tarascon, 11; Lieutenant Mathieu de la Tour, 11; Captain Albert Auger, 7; Lieutenant Gond, 6; Lieutenant Borzecky, 5; Adjutant Herrison, 5.

Captain Heurteaux, chief of the corps from December, 1916, until he was wounded in September of the following year, rivaled the marksmanship of Guynemer when he downed a hostile plane with a single bullet. Heurteaux, in the words of an appreciative chronicler of The Storks, "used to amuse himself in the midst of battle by politely bowing and waving ironic greetings to his encircling enemies. This open contempt for them increased their hatred, he explained, and tempted them to shake their fists at him in reply, thus often exposing them in their blind fury to his superior adroitness in maneuvering and attack."

A grave young pilot named René Dormé became so skilful in handling his machine that the superb Guynemer regarded his ability as greater than that of any of his fellows. Dormé was also a remarkable shot. In four months he was victor over twenty-six enemy planes, fifteen of which were officially witnessed as they fell. The end of René Dormé is veiled in mystery. Following a fierce combat high in the clouds on May 25, 1917, he pursued his opponents above German territory. Later, observation balloons reported that a French airplane had come to earth across the enemy lines and had been consumed by fire, which indicated to their practised vision that the pilot had been able to set his plane ablaze before it was seized by German captors. Though the enemy subsequently announced Dormé's death, the report, for certain suspicious reasons, has been given little credence. "Second only to the crushing loss of Guynemer, France's idol," has his passing been mourned by fellow aviators and by the nation. As a discriminating observer of The Storks has stated, "While both were lads of excessive modesty, Guynemer's air tactics were far more spectacular than those of Dormé. Guynemer was perhaps the better marksman of the two, but Dormé, he conceded, was the better pilot. Dormé's dodging maneuvers were celebrated throughout France."

It was on the day of Dormé's disappearance that Guynemer achieved the Magic Quadruple, besides defeating two more planes that fell far within the German lines. Guynemer the avenger! Guynemer the miraculous knight of the air! Less than four months later he fell as Dormé fell, on hated enemy soil. And, in turn, his death was avenged by the famous French Ace, René Fonck of Escadrille Nieuport-103, who within two weeks slew the Hun airman that had brought to earth the Wingèd Sword of France.

"He was our friend and our master, our pride and our protection. His loss is the most cruel of all those, so numerous, alas, that have emblazoned our ranks. Nevertheless, our courage has not been beaten down with him. Our victorious revenge will be hard and inexorable." These are the words of Lieutenant Raymond, Guynemer's successor as Commandant of The Flying Storks.

PREPARED BY THE EDITORIAL STAFF OF THE MENTOR ASSOCIATION
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GUYNEMER AFTER A BOCHE VICTORY

GUYNEMER, THE WINGÈD SWORD OF FRANCE

Hunting in the Air, by Captain Georges Guynemer

Translated from the French

FIVE

THE public as a rule has a false idea of hunting and the hunters. They very easily imagine that we are 'way up there at our ease, directing events, and that the nearer we are to heaven the more we are invested with Divine Power. I cannot express in words the enervation that I feel sometimes while listening to the inept remarks addressed to me in the form of compliments, and which I am compelled to accept with a smile, which is almost a bite. I want to shout out to the speaker: "But, my poor fellow, you ought not to speak about this subject, for you know nothing whatever about it. You do not understand the first word of it all, and you can hardly believe how little your eulogies please me, under the circumstances."

But if I answered in this way, no one would think of honoring my sincerity, or my desire to spread sane ideas—rather all would declare that I was a rude fellow, pretentious and a swaggerer, or something worse.

This is the reason that I listen, remain dumb, and let the enervation gnaw at me. Some tell me: "It is better to leave to hunting that mysterious atmosphere which serves as an aureole to the Ace. If the layman were to become competent to judge, he would possibly no longer hold the same admiration for the hunters." You will admit that this suggestion is not very flattering to us. In fine, according to this suggestion, we are interesting to them only because they know nothing about our work.

They say of me: "Guynemer is a lucky dog."

Certainly, I am a lucky dog, for I have added up forty-nine (this was written before the grand total was made) victories and am still alive, and I might have been killed during my first fight. If we talk this way, every person alive today is lucky; for he might have died yesterday.

But I might astonish some persons considerably if I answered: "It's a good thing that I was a lucky dog, for I have been brought down by the enemy on seven different occasions."

I know that they will rejoin that this was really luck, for I managed to escape death. But, was it luck that day, when, carried along by the great speed of my Nieuport, I rushed right past a Boche, giving him a chance to puncture an arm and wound me in the jaw? Was that luck, my fall of 3,000 meters after a shell had passed through a wing of the machine? And how many episodes there are of a similar character! Certainly, I do not wish to pretend that the question of chance, which I call Providence, does not intervene in war. But between that and the assurance that every act is guided by a manifestation of a good star—there is a world of difference. And if I dispute this opinion so sharply, as far as it concerns me, it is not, *certes*, because I am annoyed, but, on the contrary, because I believe that it is rendering a poor service to say that we succeed in any human activity through luck.

Yet if we will only eliminate this factor we shall recognize the fact that neither that unfortunate Dormé nor I are instances of the effect of chance upon the career of airplane-hunters. He was surnamed "Invulnerable" because he almost always came back from his cruises without a scratch. We were almost astounded if his airplane bore the mark of a single bullet. With me, on the contrary, I had the special faculty of coming back with missiles all over my machine.

Why was there this difference? We had almost the same methods of attack. We proceeded along uniform principles, approaching the enemy to point-blank distance. What then? The reason is plain: Dormé was better at maneuvering than I. He called upon his skill to help him at the moment of attack, and when he judged that he was not sure of success, he went into a spin and broke away from the duel. I, on the contrary, used the normal method of flying, never having recourse to acrobatics, unless it was the last means to be employed. I stayed close to my adversary, as if I were possessed. When I held him, I would not let him go. These two systems have their advantages and their defects, which should not astonish you, for perfection is not of this world.

I can draw but one conclusion from these two methods of fighting, and it is of capital importance.

It is that hunting in the air must be done according to the temperament and character of each individual hunter. If it show itself as individual prowess, all the better. This must be cried out aloud, for many young men come to the squadron with false ideas and arrested wills, planning to bring down Boches in the style of Dormé or Heurteaux. It is deplorable. Nothing is to be expected of the man who relies upon his memory in attacking an airplane. He may recall the way that some Ace acted under similar circumstances. He may attain a measure of success, but he will never be a real scout.

He who has in him the quality of a champion is the pilot who has recourse to his own initiative, to his own judgment, to his own personal equation.

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GUYNEMER, THE ACE OF ACES

GUYNEMER, THE WINGÈD SWORD OF FRANCE

A Tribute, by Premier Georges Clemenceau

Translated from the French

SIX

HOW difficult it is to find a little black point through a rift in the clouds, which, found again soon afterwards in the field of blue, is about to wrap itself in a mist of white smoke, and seems to be celebrating in its own honor, but is only Death's messenger. That is Guynemer, far up there, or some other of 'The Storks' under attack by German shrapnel. This war, beyond the range of vision, in the tragic infinity of space, watched by all the world!

"He who was able to place himself in the first rank of that band of messengers from the earth to the heights, in response to the wingèd beings that the heavens sent us long ago, fully merits to live among us as a symbol of one of the greatest efforts of the human will.

"There, all alone, in the very highest, in the imperturbable calm of absolute self-possession, waiting for nothing but a succession of unerring motions gauged by correctness of eyesight and promptness of bold decisions, on the edge of a bottomless abyss ready to swallow everything, without the supreme aid of a look or the hand of a friend—is that not something far above all the historic beauty of the greatest sacrifices for the noblest causes—something as it were of a miraculous concentration of superhumanity? To face every day the sublime adventure, in the sun, in the wind, in the rain, to pursue the enemy and seize upon the decisive moment that will place him at the mercy of the cannonading, beneath the fugitive angle which is offered suddenly, and will never occur again, to begin, and begin again, every day, and to always come back victorious. Thus lived Guynemer, now borne away in a great apotheosis, amid the acclamations of his companions in glory.

"Guynemer, born to civil life like so many of his companions, when William II of Germany decided that the hour had come for France to demonstrate what she had preserved of that nobility of blood in which her history had been moulded—Guynemer, without a word, resolved to lift his France to the highest! And upon that day when his destiny was achieved, all of us bear witness that he acted upon his resolution.

"One day, it was granted me to clasp that hand in which not a quiver revealed the control of the supreme power of nerves and courage. Eyes of lovable youth! A gentle smile of timidity! Simple, quiet replies, gestures disguising the consciousness of great hours incessantly lived over! In the greatest heart lies the purest simplicity."

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THE MENTOR · DEPARTMENT OF BIOGRAPHY
SERIAL NUMBER 166

GEORGES GUYNEMER

The Wingèd Sword of France

By HOWARD W. COOK

MENTOR GRAVURES

GUYNEMER WHEN HE BEGAN HIS FLIGHTS

GUYNEMER AND HIS FAITHFUL GUNNER, GUERDER

GUYNEMER AT THE WHEEL

By courtesy of the Century Co. From the drawing by Madame J.C.Breslau.
GEORGES GUYNEMER

MENTOR GRAVURES

GUYNEMER BROUGHT DOWN BY THE BOCHE

GUYNEMER AND A BOCHE VICTORY

GUYNEMER, THE ACE OF ACES

NOTE—The following article is based on Guynemer's own records and the account of his exploits published by his close friend and authorized reporter, Jacques Mortane.

WHEN the history of the World War is finally written, one of the names conspicuous in its pages will be that of Georges (jorje) Guynemer (gee-ne-mare). The name of Guynemer has become synonymous with brave deeds and symbolical of the great spiritual glory that belongs to France. Guynemer has been called "The Ace of Aces" and "The Wingèd Sword of France"; but these names express only in part the characteristics of a world-famous hero whose life, as Clemenceau (klem'-ahng-so) so aptly terms it, "even though short, was a sufficiently beautiful adventure." Guynemer's part in the World War is over. His own active chapter is done, but his spirit lives on in the hearts of every allied airman.

Guynemer, born in December, 1894, was the son of a retired officer. As a boy he was agile and ambitious in sports, though of slender build and somewhat delicate. He was especially fond of mechanical toys and miniature airplanes, and even in the early school days, when flying was

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looked upon more as a sport than an actual military factor, Georges declared to his father his ambition to become an aviator.

And then came the war. The youth, who because of physical weakness was refused admission to the army no less than five times, was finally accepted at the age of twenty, on November 23, 1914. Then began a career that in a few short years was destined to make the name of Georges Guynemer immortal.

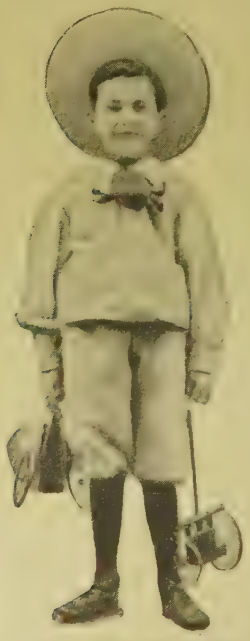
GUYNEMER AT TEN YEARS OF AGE

Guynemer's First Victory

In describing his first meeting with the Boche (bosh) on July 19, 1915, to his friend, Jacques Mortane, Guynemer said:

"I was on a two-seated 'Parasol' with Guerder, my mechanic, as passenger. I had promised myself for some time to undertake a pursuit in my airplane, but I had always been ordered on reconnaissances or photographic missions, and that kind of work did not suit me at all. It is always set aside for the newcomers in the squadrons, and I wanted to show that grit was not the exclusive possession of the older men."

A Boche had been sighted at Coeuvres (koev-r), and Guynemer took flight with Guerder and was soon in pursuit of the enemy. As the Boche's plane was faster there was no possibility of catching him. Nevertheless, the joy of finding a first adversary made Guynemer eager to attempt anything. From a great distance he fired at his opponent—possibly without any hope of hitting him, but steadily nevertheless. He pursued him as far as the Coucy aerodrome, where he saw him alight. This displeased Guynemer greatly. He had gone out to "get" a Boche and had to go back empty-handed.



GUYNEMER WHEN SIX YEARS OLD

"There we were," he said, "with these sad thoughts, when suddenly another black point appeared on the horizon. As we came nearer, the point became larger and was soon plain, as a Boche. He was moving towards the French lines, thinking only of what he might find ahead. He did not dream that on his track were two young fellows determined not to return to the squadron without performing their task, two young fellows who believed that to return to headquarters without a Boche would mean derision.

"It was not until Soissons (swahs-sohng) was reached that we came up with him, and there the combat took place. During the space of ten minutes everybody in the city watched the fantastic duel over their heads. I kept about fifteen meters from *my* Boche—below, back of and to the left of him, and, notwithstanding all his twistings, I managed not to lose touch with him. Guerder fired 115 shots, but could not fire precisely, as his gun jammed continually. On the other hand, in the course of the fight my companion was hit by one bullet in the hand and another 'combed' his hair. He answered with his rifle, shooting well. We began to ask ourselves how this duel was going to end, but at the 115th shot fired by Guerder I saw the pilot fall to the bottom of his car, while the 'look-out' raised his arms in a gesture of despair, and the plane did a nose spin, and plunged down into the abyss in flames. He fell between the trenches. I hastened to land not far away.

GEORGES GUYNEMER

"At last I was able to live my dream! I, who had so long desired to join in the fighting, had managed to gain a victory. What shall I say about the reception given me by the troops on the ground—ovations, congratulations, all under the vengeful cannon of the enemy. I have beaten down other Boches since that time, but when I think over my aerial duels my recollections always fly back to that first one."

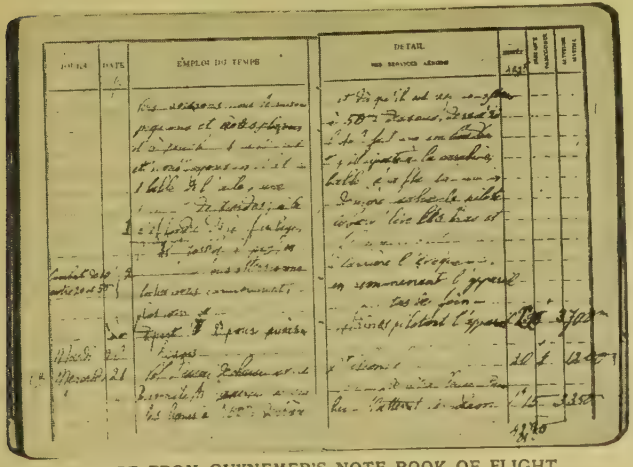
Official recognition came to Guynemer the next day when the Military Medal was awarded him for being "a pilot full of spirit and boldness."

In considering Guynemer's personal accounts of his various flights, it is evident that the Ace, while not inspired by the same craving for combat that Major Bishop acknowledges, was a hero of unusually high-pitched nerves, inspired with dreams of battle, and whose quests for the Boche were insatiable.

Guynemer talked much concerning his "will." It was his *will* to get into service in spite of his five rejections and being compelled to enter as a mechanic. He *would* scorn an observer's work and become a hunter. He *would* make his score larger and larger. He *would* fly regardless of climatic conditions or his own health, going up even when convalescing from injuries. And it was this *will* which doubtless made him the terror of his enemies and the glory of France.

Among the first duties assumed by an airman when he is learning the mastery of his machine is that of reconnoitering. But Guynemer, fast becoming specialized in pursuit, soon stopped all reconnoitering and found himself assigned to a single-seated airplane. It was on February 3, 1916, that in the course of a single flight he succeeded in getting his first official "double."

He was making his usual round in the Roy section just before noon, and was about to end his flight, when he saw an airplane in the distance. "The game was coming to me," he said. All he had to do was not to let it escape. Guynemer gave chase and soon caught up with it. The enemy did not seem to wish to avoid the fight. Possibly he had not seen Guynemer at all. Being faster than he, Guynemer got behind him, opening fire at 100 meters,* and, as he fired at rapid intervals, his cartridges were soon exhausted. At that instant a cloud of smoke, which increased rapidly, made a sinister tail to the Boche, who dived, severely wounded. He fell, however, within his own lines, and Guynemer could not follow him to earth. It was certainly



A PAGE FROM GUYNEMER'S NOTE BOOK OF FLIGHT
Showing record of his first victory, July 19, 1915

* A meter is a little more than a yard n length – exactly stated, 39.37 inches.

one enemy less, but Guynemer's total record was not improved.

Fortune, however, favored him. "I was coming back," he said, "thinking over the methods of fighting, considering how I had attacked, asking myself whether I would not have done better to approach from some other direction, when at almost 11.30 I found another hunting plane. Yes, I had made a mistake just now, when I opened fire from so far away—I should have waited. At 100 meters we cannot be sure of the aim. My method, which up to this time always consisted in attacking almost point-blank, seemed to me much better. It is more risky, but everything lies in maneuvering so as to remain in the dead angle of fire. Certainly it is rather difficult, but nevertheless it can be mastered with skill.

"While going over these things to myself I had come near enough to the Boche without running any great danger. At 20 meters I fired. Almost at once my adversary tumbled in a tail-spin. I dived after him, continuing to fire my weapon. I plainly saw him fall in his lines. That was all right, no doubt about him. I had my fifth! I was really in luck, for less than ten minutes later another plane, sharing the same lot, spun downward with the same grace, taking fire as it fell through the clouds.

"The second day afterwards, before Frise, in a new tête-à-tête with a hunting Boche, I leaped forward, caught up with him, got in back of him, a little below to avoid his fire, and at 15 meters fired 45 cartridges. He swayed sadly, in the shock of death, which I was beginning to be able to diagnose, then fell like a stone, taking fire on the way. He must have been burned up between Assevillers and Herbecourt. Although he was really my seventh Boche, he alone gained me the honor of a special mention."

GUYNEMER BEING DECORATED WITH THE ROSETTE OF THE LEGION OF HONOR

Guynemer (in dark uniform) has just received the Rosette

Guynemer's fifth citation rewarded him for this exploit, and declared him a hunting pilot with audacity and energy for any adventure.

According to Guynemer's own testimony, one of the most difficult things an airman of the Allies has to do is to compel the Boche to accept a duel, not that the latter lacks courage, but rather that he prefers not to run the risk of being brought down. As a result of forcing engagements, Guynemer seldom returned from a flight without a wound of some sort or other. On several occasions his garments were drilled with holes, his clothing more than once taking on the appearance of a sieve. This was the youth who in less than eight months from the downing of his fifth Boche had been awarded seven palms for his war cross.

Guynemer and His Parents

Like Nungesser, Dormé (dor-may) and Triboulet (trib-oo-lay), Guynemer would not rest when he had left the hospital convalescent from some of his more serious wounds, and it is by signs like these that

GUYNEMER READY FOR FLIGHT

we find the souls of great heroes who know nothing about "vacations," even for their health, so long as others are fighting. Guynemer was not strong and should have rested after his stay in the hospital. His parents begged him to rest, so Guynemer compromised by agreeing to establish himself near his family at Compiègne (kom-pee-ane), where at the same time he could serve France. Not far from his paternal home, at Vauciennes (vo-see-enn), his Baby Nieuport rested in a hangar, ready to carry him into those great open spaces to search for the enemy whenever the atmosphere permitted.

One of the hero's sisters was entrusted with the task of studying the atmosphere at dawn each day to see if it were "Boche weather." And as soon as it was light enough, slyly, like a boy planning mischief against the orders of his elders, the Second Lieutenant Ace came down from his room and mounted his Nieuport for a prospective fray.

He was convinced that no one in the house suspected his escapades except his sister. How little he understood the hearts of a father and mother! Father Guynemer has told of the anxieties, the worries lived through during that convalescence. The boy had gone. Would he come back? Would some hateful enemy appear on the way and prevent his return to the bosom of his family? The minutes of anxiety were as long as centuries. As for the loving Mother Guynemer, she did not dare show her son that she was undeceived by his stratagems, nor did she wish him to see her when she watched him fly away. Through the blinds, with tear-dimmed eyes, she watched him depart in the service of his country. When she saw her boy draw far away, she returned to her household duties—but not until Georges' machine had become a tiny speck.

Here is one of the most moving pages in the hero's life—this feigned ignorance on the part of the parents, the plotting of brother and sister. Guynemer, face to face with his family, pretended that he would run no danger. He insisted on his own prudence. Nothing serious could happen to him, because he avoided all risks. But as soon as he began to turn the conversation upon

GUYNEMER AND MACHINE AFTER 3,000-METER TUMBLE

the subject which was all his life, the comforting words which he had spoken were at once contradicted by the many adventures and varied anecdotes which he recalled. No peril had been too great for him. He played with danger, and looked for it.

A Fall of 3,000 Meters

Guynemer hated the word "luck," perhaps because he was accused of having so much of it, and when his Spad was struck by a shell 3,000 meters from the earth, the airman falling the entire distance, he repudiated the suggestion that his was a lucky star!

This phenomenal escape took place on September 23, 1916, Guynemer having just finished an exploit humorously set down by his friend Mortane as follows: "Put an egg in boiling water when the Ace of Aces begins a battle; you wait until he has downed three Boches, you take out the egg, and it is done to a turn. What a triumph for the restaurant menus!"

While contemplating the immensity of the azure heavens at an altitude of 3,000 meters above the earth, Guynemer suddenly felt a shell strike one of the wings of his airplane with all its force. The left wing was torn to shreds, the canvas sent floating in the wind, as the airman and his machine began a descent.

GUYNEMER FACE TO FACE WITH A DEFEATED BOCHE

"My apparatus fell," said Guynemer, "broke apart, crumpled up in the abyss, unable to bear me any longer. I really felt the call of death and I seemed to be hastening towards it. It seemed that there was nothing to prevent my crashing to the earth. A tail-spin, terrible, fearful, began at 3,000 meters and continued to 1,600 meters.

"I felt as if I were indeed lost, and all that I asked of Providence was that I should not fall in enemy territory. Never that! They would have been too happy. Can you think of me buried with my victims? But I was powerless to exert my will, my airplane refused to obey.

"At 1,600 meters I tried anyway. The wind had driven me almost over our lines. I was already half-happy. Now I dreamed of being interred with sympathetic comrades following my body. That was not a fine dream, but at least it was better than the other.

"I had no longer to fear the pointed helmets. But, nevertheless, I felt all that death might be, and it was not a pleasant thought. The fall continued. The steering gear would not respond to my tugging. Nothing worked. I tried it to the right, to

GUYNEMER'S FAVORITE AIRPLANE, *VIEUX CHARLES* (OLD CHARLES), ON EXHIBITION IN PARIS

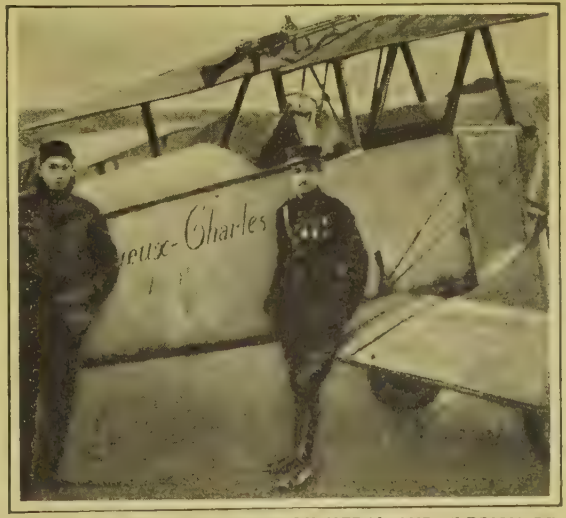
the left, pulling, pushing, but got no result. The comet did not slow a bit, I was drawn invincibly towards the earth where I was about to be crushed.

"There it was! One last brutal effort, but in vain. I closed my eyes, I saw the earth, I was plunging towards it at 180 kilometers* an hour, like a plummet. A terrible crashing, a great noise, I looked around. There was nothing left of my Spad.

"How did it happen that I was still alive? I asked myself, but I felt that it was so, and that was enough. However, I think that it was the straps which held me in my seat that had saved me. Without them I would have been thrown forward or would have broken some bones. On the contrary, they were dug deep into my shoulders, a silent proof, doubtless, that I should give them full consideration. Had it not been for them I would certainly have been killed."

Infantrymen hurried to the spot to pick up the pieces. Finding Guynemer not only alive, but unhurt except for a bruised knee, they conducted him home in triumph, singing the "Marseillaise" at the top of their voices.

Guynemer went to view the remains of the Boche that he had brought down first. The pilot had on his body a card, almost burned up, on which a feminine hand had written these words: "I hope that you will bring back many victories."



GUYNEMER WITH THE MILITARY MEDAL AND "LEGION OF HONOR"

A Quadruple Victory

The Magic Quadruple,—the successive defeat of four airplanes, was Guynemer's

*A kilometer is a thousand meters, or 3,280 feet, 10 inches.

achievement, one of which was downed in one minute, on May 25, 1917, according to the following schedule:

1st airplane, 8.30, 2nd airplane, 8.31, 3rd airplane, 12.01, 4th airplane, 6.30.

THE DEBRIS OF THREE AIRPLANES BROUGHT DOWN BY GUYNEMER IN ONE DAY

Four airplanes beaten down on one day by the same aviator was a record. On February 26, 1916, Navarre secured his first "double." Nungesser, on the Somme, destroyed a balloon and two airplanes on a single morning. But by his quadruple victory Guynemer exceeded these two earlier records and the one established by himself in the Lorraine when he brought down three airplanes in one day. On the morning of May 25th Guynemer saw three enemy airplanes flying in concert toward French lines. He pounced upon them, and they took to flight. He attacked one of them, maneuvering to get him in the line of fire, then fired, and after the first shots the enemy machine dived and fell in flames.

Meanwhile the danger for the single-seated machine was surprise from the rear. While he was attacking in front, it was necessary for Guynemer to watch the rear. Guynemer turned, and saw a second adversary coming full at him, trying to reach him. But he had fired already from above downward, and hit him with an explosive bullet. Like the first, this airplane took fire. The victories of Guynemer were lightning-like, requiring only a few seconds of fighting.

Towards noon an audacious German airplane flew over the aviation field. French squadrons have taught the enemy respect for their lines and the unfortunate fellow who ventures above them seldom returns home.

GUYNEMER BROUGHT DOWN BY A SHELL FROM A HEIGHT OF OVER 9,000 FEET

His only injury was a bruised knee

It was something of a mystery how this one had broken through the barrage. But to ascend to the sky after him and to reach him, no matter how speedy the machine, required several minutes, time enough for the enemy to flee, his mission accomplished. All of the machines had come down except the one driven by Guynemer.

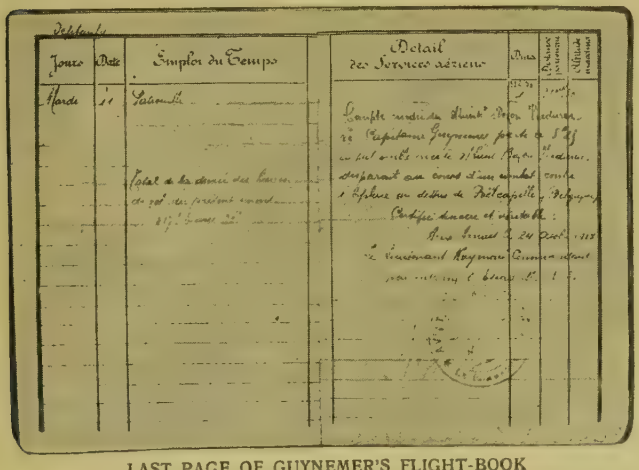
Guynemer came upon

his adversary like a whirlwind. He fired. Only one shot from his machine-gun was heard. The airplane fell, the propeller revolving at full speed, and dug itself into the earth. Guynemer had killed the pilot with a bullet in the head.

That evening Guynemer went out for the third time. It was about seven o'clock, over the gardens of Guignicourt (geen-ye-koor), that a fourth machine, beaten down by him, fell in flames.

And as the young conqueror came down at sunset, he executed all kinds of fancy figures in the air to announce his victory to his comrades,—all the turns, and twists and loopings of which he was so great a master.

But some facts must be added as a sequence to the official announcements. The first airplane brought down was a two-seater, one of whose wings was broken in descent; it fell into the trees near Corbeny. The second, another two-seater, fell on fire near Juvincourt. The third was also brought down afire near Courlandon. Finally, the fourth, also set on fire, dropped between Condé-sur-Suippes (sweep) and Guignicourt. Add to this that, on that same day, Guynemer had collaborated with Captain Auger (the slain Ace) in putting to flight a group of six single-seaters.



LAST PAGE OF GUYNEMER'S FLIGHT-BOOK
Recording his final departure

It was the quadruple that brought Captain Guynemer the Rosette of the Legion of Honor with this commendation:

"An élite officer, a fighting pilot as skillful as audacious. He has rendered glowing service to the country, both by the number of his victories and the daily example he has set of burning ardor and even greater mastery increasing from day to day. Unconscious of danger, on account of his sureness of method and precision of maneuvers, he has become the most redoubtable of all to the enemy. On May 25, 1917, he accomplished one of his most brilliant exploits, beating down two enemy airplanes in one minute, and gaining two more victories on the same day. By all of his exploits he has contributed towards exalting the courage and enthusiasm of those who, from the trenches, were the witnesses of his triumphs. He has brought down forty-five airplanes, received twenty citations and been seriously wounded twice."

One of the most conspicuous virtues of Guynemer was his extreme modesty. He wore his crosses and medals not from love of show, declaring that while it was sweet to know one was celebrated, that glory was accompanied by many drawbacks.

ON THE EVE OF HIS DEATH, SEPTEMBER 10, 1917
Guynemer—on the further side of the airplane—was obliged to land at a Belgian aerodrome for repairs

"You no longer belong to yourself," said Guynemer, "you belong to everybody. To be well known is to see around you all the time a number of persons who never cared for you before but have suddenly assumed a pseudo-friendship for you. All at once they find out that you are a charming conversationalist, an infinitely fine soul, and more of the same kind of gush. Their object is to go out with you, and to take you to see their people. And when they look at you they imagine that you admire them. Such is the misfortune of renown! You no longer know where sincerity begins, whether they are pleasant to you out of friendship or vanity. We are apt to become unjust to those who do not deserve it, and confide in others who deserve it still less."

The Last Flight

It was on August 20, 1917, that Guynemer, piloting "Old Charles," achieved his last official triumph,—a German plane, which crashed to earth at Poperinghe, Belgium. A few days after this Guynemer took command of the Stork Squadron. Thus the difficult task of guiding the administrative work of The Storks fell upon the shoulders of this young soldier. With these new duties he might have abstained from flying. But this would not have been like Guynemer. He flew from five to six hours each day. On September 11th, notwithstanding the bad weather, Guynemer started upon a cruise with Second Lieutenant Verduraz. After furrowing space for a long time without success, for atmospheric conditions kept the Boches on the earth, the two pilots at last saw a two-seater which appeared to be lost in the clouds. The hero darted forward, attacked, but his gun missed fire. He maneuvered for position again without even trying to dodge the answering fire, so sure was he of himself in dealing with this Boche. A single two-seater was but a trivial thing to him.

Second Lieutenant Bozon Verduraz had gone towards other fights with the conviction that his comrade would, without a doubt, come out

of the duel victorious; but he found nothing there when he returned. Guynemer, the hero of dreams, had vanished in mystery.

And here above Poelcapelle the career of this most brilliant pilot of the air was terminated, after he had added up 755 hours of airplane flight!

The censor forbade the announcement of Guynemer's disappearance, but the news was passed from mouth to mouth. Guynemer? Every one deemed him invulnerable—no one believed that he could be killed.

But many days afterward came the news from a German source. The Ace of Aces had been beaten down near the cemetery of Flemish Poelcapelle. Two soldiers had been present at the place of the catastrophe. One wing of the Spad had been broken. The pilot lay there, killed, with a bullet in his head, and one leg broken. On him was found his commission, which made it possible to identify the body.

The district in which Guynemer had ended his career in a burst of glory was being hammered by the English artillery. Attacks followed. The Allies looked for his grave in the cemetery of Poelcapelle when they took it. But they never succeeded in finding it. It was learned later that, on account of the incessant danger, the Germans had not been able to remove the remains to inter them. The soul of Guynemer in the Great Beyond had the supreme satisfaction of knowing that the body was not defiled by his enemy.

GUYNEMER'S PILOT CARD, REPRODUCED IN "DIE WOCHE" (THE WEEK) OF BERLIN, AFTER HIS DEATH

Lieutenant Weisemann, the German airman who had brought Guynemer's career to a close, survived his success but a few days.

SUPPLEMENTARY READING

GUYNEMER, THE ACE OF ACES. A Record of His Achievements.
By His Friend, Jacques Mortane

GEORGES GUYNEMER, KNIGHT OF THE AIR. A Biography, Translated from the French of *Henry Bordeaux.*

EPIC OF THE AIR
Article in *The Living Age*, June 8, 1918

GEORGES GUYNEMER, ACE OF ACES
Literary Digest, October 13, 1917

*** Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER

A year has passed since Guynemer gave his life for France, and his story is now history. During the year other skymen have made great records: some of them may accomplish supreme achievements in the future. But there is a certain halo of romance about the young Sir Galahad of the Sky that distinguishes him and gives him a place of his own.

★ ★ ★

Moreover, there are special considerations to be taken into account in reckoning up Guynemer's achievements. While other airmen of the World War have been credited officially with a greater number of victories, it is a recognized fact among Parisian journalists and Guynemer's own associates among "The Storks," that Guynemer was victor over perhaps twice as many Boche planes as the fifty-three accredited him by the French Militaire. The French system of accounting downed airplanes has been extremely exacting. The French insist that the aviator must send his victim to destruction in sight of two official observers. In Guynemer's case this rigorous method of checking up official records was strongly emphasized because of his world-astonishing prowess. When Guynemer's friends protested, he only smiled—and downed more Boches.

★ ★ ★

English and German officials, have been more lenient in giving official credit to their airmen. A German scores if he simply sends a bullet through his adversary's motor, compelling descent. Germany, with her idolatry of all things German-done, accredits Captain Baron von Richthofen with something more than a hundred victories. Major William A. Bishop of the English flying forces, according to his own story recently published, downed seventy-two enemy planes in confirmed victories during the year 1917. The rigid system of official accounting by the French is shown in the case of Lieutenant Nungesser, the second French Ace cited for the Legion of Honor. Also in the officially accredited victories of Lieutenant René Fonck, recognized as the greatest French air fighter since Captain Guynemer. Fonck is credited with bringing down more than sixty enemy airplanes—six of them in one day in the course of two patrols.

★ ★ ★

While Georges Guynemer received nearly every honor that the French Government had in its power to bestow for the services rendered his country, the fifty-three airplanes he officially destroyed meant more in the period between 1915 and 1917 than the downing of many more planes thereafter; for it was Guynemer who led French warfare in the air from defeat to victory, and who was supremely successful despite the mechanical shortcomings of the airplanes that were in use when he entered the service.

★ ★ ★

The story of Guynemer and his wondrous exploits forms one of the great dramatic chapters of the World War, and it will go down the years as a record of poetic heroism to be read for the inspiration of future generations of youth. There are many brilliant airmen. Guynemer was more than that; he was a dedicated soul.

W. D. Moffat

EDITOR

In the Pantheon

That classic mausoleum for famous Frenchmen in Paris, the following inscription has been set up to perpetuate the memory of Guynemer:

"Captain Guynemer, commander of Squadron No. 3, died on the field of honor September 11, 1917. A hero of legendary power, he fell in the wide heaven of glory, after three years of hard fighting. He will long remain the purest symbol of the qualities of the race: indomitable in tenacity, enthusiastic in energy, sublime in courage. Animated with inextinguishable faith in victory, he bequeathes to the French soldier the imperishable remembrance which will exalt the spirit of sacrifice and the most noble emulation."

ONE

THE greatest business organization that the world has ever known is the one engaged in conducting the present war. So huge have been the tasks thrust upon the bodies of administrators appointed by their Governments, so great the problems that confront them, that the mind cannot grasp the reality. An army has been organized, in comparison with which all other armies dwindle into nothingness. More men are engaged in this war than in all other wars combined. More ammunition is used in a single day than was needed to wage some wars for years.

The amount of food that is needed every day to feed the army of the Allies in France staggers imagination. Railroads are congested; thousands of motor trucks, and a system that will permit of no delay, have become essential in the fulfilment of this great problem.

Think of a bakery that turns out a million loaves of bread per day, of a refrigerating plant that loads eighty huge cars of meat daily, and you have but two branches for provisioning a single army.

Stretch the railroad tracks built to supply the American Army, alone, into a single-track railway, and it would extend from New York to San Francisco. Put in a single line the warehouses that Uncle Sam has built and one would see a row of buildings extending mile after mile all the way from Philadelphia to Washington. Add to these structures the buildings erected for use as barracks, hospitals, etc., and one obtains but a faint idea what an enormous proposition is the business of war.

Millions of men require millions of pairs of boots, millions of uniforms, millions of overcoats, millions of raincoats, millions of helmets, millions of gas-masks, millions of rifles, billions of cartridges.

If you can grasp that, think of the necessary food supply, the supply of ammunition, the Red Cross material, the motor trucks required, the tanks, airplanes, cannon, ambulances, the thousand and one things such as lumber, barbed wire, tools, machinery, and the countless supplies needed for engine and automobile parts.

Then there are locomotives, freight and passenger cars, and the equipment that goes with them. Picture the whole problem as vast as your mind will permit, and then you have but a scant conception of the hugeness of this organization that has only recently sprung into existence.

The amounts expended are almost beyond computation. If a few years ago we had been told there was so much money, or that it was possible for nations to spend such amounts as have already been expended, we would not have believed it. Where we formerly figured in millions, we now talk of billions, and more billions.

Quantities that seemed to be beyond mechanical means are turned out in a remarkably short space of time. Capacities have been increased from day to day, until there seems to be no limit. The impossible has apparently been achieved. A war that they said "could not last" has lasted.

Back of it all is organization, division of labor, replacing men by women. Executive minds and business genius have made all things possible.

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FROM the Mediterranean to the edge of the devastated part of northern France, every available foot of soil is under cultivation. As the men were gradually withdrawn from the farms, the women and children at first took their places, until finally, as more and more men were called to service, the problem of sufficient labor became increasingly serious. Men were brought from Algeria, Morocco, the Soudan, even from distant Annam and Cochin, China, but still the cry was for more help to make possible the tilling of the soil, the planting and harvesting of crops. War gardens were to be seen on the fringe of No Man's Land. Parks were converted into truck gardens, waste land was used to give France the necessary food supply.

The vineyards could not be neglected. No meal in France is complete without a glass of wine. I think a Poilu would rather go without his bread than be deprived of his wine. Proper care of grapes requires skill and knowledge of grape culture, so experienced husbandmen almost too old to work have been pressed into service, and to them is intrusted the task of maintaining the grape supply.

Chinese have been imported from China in thousands. Many of them are expert farmers, and they have accomplished wonders in irrigation, adding materially to the food supply. Cattle are being conserved as much as possible, because of the enormous demand for milk in the hospitals. There is a shortage of horses because so many of these animals are needed at the front. It is not an uncommon sight to see cattle and horses harnessed together drawing plows, and men, women and children are often compelled to do some of the work formerly done by animals.

Generally speaking, the supply of vegetables and garden truck is ample for all needs, and there is sufficient to meet the requirements of civilians and soldiers.

Prices are naturally much higher than in peace times because of the scarcity of labor and high wages, which in France, as in the United States, have increased materially. Much of the land in the reclaimed part of the Republic is practically valueless. Farming will be dangerous for some time to come, because of the danger of hidden shells, which if hit with a plow might explode.

A considerable amount of land has been saturated with poison, impregnated with millions of pieces of steel from shrapnel and high explosive shells. It will take years to make much of the occupied part of the Republic available for farming purposes. But the soil throughout France is rich, the peasants are thrifty and understand intensive farming. Agricultural conditions today are probably better than before the war, as there are hundreds of thousands of acres in cultivation now, where formerly was park land, and war gardens take the place of flower gardens. Every lawn has its truck garden, every school child has a garden of herbs and vegetables.

German prisoners are also used on the farms; soldiers on furlough may be seen in their uniforms harvesting crops; everyone lends a hand, and therefore all France, outside the battleground, is a smiling country in the growing season, carpeted with green and gold.

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PHOTOGRAPH BY E. M. NEWMAN

VEGETABLE MARKET IN THE LATIN QUARTER, PARIS

FRANCE IN WAR TIME

The Food Problem and How It Is Being Met

THREE

FRANCE has no Mr. Hoover, but the French are Hooverizing, none the less. One cannot obtain bread without a ticket, and then but 100 grammes ($3\frac{1}{3}$ ounces) are allowed each person per meal. Practically no butter is served in any hotel or restaurant. A few have a very little sugar, but many serve only saccharine. There are three meatless days a week, and these days are rigidly observed.

Vegetables are fairly plentiful, but expensive. Fish seems to be abundant, but, like everything else, has advanced enormously in price. The food problem in France, like the same problem in the United States, has been met by conservation and restriction.

The civilian population accepts all sacrifices willingly, and puts up with bread that is as different from the French bread of other days as it could possibly be. The bread they now have is almost black, is heavy and unpalatable. But conditions are gradually improving, and lately they have been permitted to use more wheat flour.

The prices of fruit are high. A single banana sells for ten cents, an apple for even more, and peaches are from twenty to forty cents apiece. Strawberries and plums are cheaper, but far more expensive than in the United States.

Chickens, turkeys and ducks are to be obtained in all the better restaurants, but the prices have about doubled. Cheese is served only on certain days. Pastry has entirely disappeared, and the little candy that confectioners are permitted to make is of such inferior quality that few care to eat it.

If there is any scarcity in edibles, there is none in drinkables. Wine, beer and other drinks are sold, but like everything else the price is very high.

To say that France is suffering for food would be an exaggeration, but that the food supply is limited and must be conserved is a statement that cannot be refuted. What she needs most is wheat, as the French people eat a great amount of bread. Sugar is also scarce, and butter and milk must be kept for the wounded, as well as for the soldiers at the front.

France has met its food problem first by conservation, then by importing all kinds of labor to till the soil. Sheep are not as plentiful as before, but as they can now be killed only by special permission their number is growing. This is also true of cattle and pigs. There is no danger of the French starving, no one need go hungry, there is sufficient for all; but restrictions are in force to guarantee a supply for the future.

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BY PERMISSION OF THE AMERICAN COMMITTEE FOR DEVASTATED FRANCE

WELFARE work has claimed the time and attention of most of the social world of France. Titled women work side by side with women who have known only toil all their lives. There is really no such thing as Society in the Republic today. All social functions have been abolished. Receptions, balls and parties are now but memories. No one thinks of spending money for an elaborate dinner or banquet. Women have packed away their luxurious gowns and donned the uniforms of relief organizations.

Orphans must be cared for, refugees given shelter. The halt and the lame, the blind and the deaf, the poor doddering creatures suffering from shell shock, the thousands of wounded, offer work for all. It is a noble cause, a vital problem that must be met, and all classes of society are responding bravely. Superiority of birth, the possession of millions, count for nothing in the larger and wider appeal that is being made in the name of humanity.

The stupendous work of the Red Cross in field and hospital service is well known. In addition this great organization has conducted various merciful enterprises on behalf of the civil population that has suffered the scourge of war. Thousands of homeless have been housed, fed and clothed, and a vigorous campaign has been waged against the spread of tuberculosis. The Y. M. C. A. and the Knights of Columbus have provided for American soldiers and sailors hundreds of huts where they may read good books and magazines, write home letters, play games. All kinds of entertainment—plays, vaudeville acts, lectures—have been given at these centers for the benefit of the men in service. The Salvation Army has sent its men and women into the front trenches to serve coffee and doughnuts to soldiers going into battle or returning from fighting, all day and well into the night. The hour is never too late for the tireless workers of the Salvation Army.

Among several individual organizations for the relief of distressed and homeless civilians, none is doing a more practical work than the American Committee for Devastated France. This committee, with American headquarters in New York, directs operations behind the lines, where old men and women are restored to hope and little children taught to play again. French villagers and townsfolk whose homes have been destroyed are made comfortable in newly-built or repaired huts; food and medicine is supplied to the feeble, clothing to the needy, and employment to those able to labor. Such work is noble service. "All the fury of German ruthlessness cannot wipe out the solace it has brought to desolate souls, or tear open again the wounds it has healed."

An English association of unique interest called by the French, *Les Amis* (aze amee), The Friends, is composed of Quakers. Their conscience forbids them to make war, but since November, 1914, they have worked unceasingly, in various sections of war-torn France, building warm shelters for families driven into cellars and ruins, and clothing and feeding the bereft. They have distributed seeds provided by the French Government, have sent out seedlings from central gardens, and helped the peasantry to begin again to raise vegetables and other food products. They have also found time to establish rabbit and chicken farms. In their uniforms of gray, the men and women members of The Friends—the name of their sect takes on new meaning in stricken France—have wrought many blessed forms of relief.

The Agricultural Relief of Allies Association cooperates in distributing new machinery for ploughing and threshing, and aids the farmers in harvesting crops. Innumerable French societies and bureaus testify to the variety and practicality of their aims and to the benevolence and patriotism of the people of France. Several organizations look after the entertainment of soldiers home on furlough; others find homes for orphaned children or those strayed from their families; still others help the widowed and fatherless to obtain work, teach men blinded in war how to employ their hands usefully, aid tradesmen to re-establish themselves in Hun-ridden districts.

All the Allies have joined hands, not only to repel and drive out the enemy, but to bind up the wounds so ruthlessly inflicted upon the fair land of France.

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ALL THAT IS LEFT OF A SCHOOL FOR GIRLS (*ÉCOLE DES FILLES*), CHESY-EN-ORXOIS, FRANCE

THE war has interfered with, but not disrupted, the educational system of France. Naturally, the colleges and universities have almost been drained of able-bodied young men. Many of the professors have been called to service. Certain studies have therefore been omitted until after the war. To take the place of the young men, a number of retired teachers have been recalled, relief workers have tendered their services, women have replaced men, and with fewer pupils and the elimination of certain courses, higher education has been maintained.

There are not so many lectures at the Sorbonne, the famous Paris university. Class-rooms are not so crowded as formerly, but there is no interruption in the school work. During all the terrible days of the great war, those who can still do so attend the Sorbonne. Science and its many problems are not being neglected. There is no sign of decadence, no thought of abandoning the search for knowledge.

Grammar and high schools in every city, town, village and hamlet are open as before the war, wherever possible. The male teachers are practically all in military uniform and are relieved from active service at certain periods to resume their teaching. By a well arranged system, groups of male teachers are brought back from the front, and there is constant interchange.

There are far more women teaching now than ever before, so altogether there has been no need to abandon the compulsory system of education, and every child may go to school. Bombardment and devastation have caused a shifting of population, and there are far more children attending school in the south of France than before the war. In such cities as Lyons, Marseilles, Bordeaux and others where the population has greatly increased since the war, added buildings have been secured for school purposes, and additional teachers have been sent to these cities.

The Latin Quarter of Paris is deprived of many of its picturesque characters. Its students and poets are gone. The art schools are attended almost entirely by girls. War has changed the character of one of the most characteristic sections of Paris. The artistic atmosphere is still there, but the Bohemian life that was is no more.

Some of the art schools have had to close, but a number are still open. Most of the models are gone, having enlisted as nurses, or as workers in the Red Cross, in bureaus for the aid of refugees, or in army canteens.

The Conservatory of Music continues to be the center for the lovers of that art. As in all other schools, there have been many changes. Most of the teachers and students have gone, but there is as keen an interest in music as ever.

Medical colleges have been almost depleted of staffs and students, and there is a scarcity of doctors. The colleges are open, but only professors who cannot be spared are permitted to stay. Students are graduated as quickly as possible, as they are all needed.

It is clear that educational conditions, while greatly changed, are still maintained with French efficiency, and that French youth will not greatly suffer from the interruptions of the war, through lack of opportunities to learn.

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IN these trying times diversion is absolutely essential to the well-being of the people. Recognizing this fact, the French Government encourages such diversions and pastimes as will relieve the tension of the public mind. Certain pleasures, considered luxuries, are prohibited. Motoring is restricted almost entirely to town and city use of automobiles. Touring for pleasure is not tolerated.

Trips on the Seine, a cheap form of entertainment, are encouraged. Versailles and its parks are thrown open to the public, and picnic parties take trains to suburban resorts and dine among the trees, just as they did in peace times.

Railroad fares have been greatly increased and travel for long distance is discouraged. Racing is practically abolished, but tennis, football and other sports are still popular.

Many of the resorts are now places of rest and recuperation for the wounded. A number of the large resort hotels are used as hospitals. Gambling, once so popular at such places as Nice (neece) and Trouville, is not permitted.

Theaters are open and well attended. The only difference is in the time of the performances. Matinées, as always, begin at 2.30, but evening performances begin at 7 and are over at 9.30. After the latter hour, Paris is dark and forbidding. This is true of most of the cities of the Republic.

We still see tables in front of the cafés, there is still the same throng of promenaders, but promptly at the "lights-out" hour, tables and chairs disappear, and the people return to their homes.

The cinema is a cheap and favorite form of amusement. The average price for a good seat is from one to two francs (twenty to forty cents). Long lines are to be seen in front of the popular cinema theaters, waiting for those attending an earlier performance to come out. Formerly, French, Italian and English pictures were the favorites, but now American films have superseded those of other nations, and there are more products of the United States studios to be seen than all others combined.

Grand opera is given as before the war, and comic opera has never been more in favor. A number of well-known actors have been killed, others are at the front. There are perhaps more women on the stage than in normal times, but all the theaters are running full blast and doing well.

Home life is less cheerful because the men are gone, but the French people are not downcast; they partake of their amusements and enjoy their theaters, they love music and attend concerts and the opera.

Americans are teaching the French baseball, but as yet they do not quite understand it. They say the ball "hurts their hands," but they are interested in learning the American game and in time will play it well.

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THE MENTOR · DEPARTMENT OF TRAVEL
SERIAL NUMBER 167

FRANCE IN WAR TIME

By E. M. NEWMAN, Lecturer and Traveler

MENTOR GRAVURES

AMERICAN SUPPLY DEPOT IN FRANCE

•

GERMAN PRISONERS AT WORK IN A FRENCH WAR GARDEN

•

VEGETABLE MARKET IN THE LATIN QUARTER, PARIS

Photograph by E. M. Newman

ARC DE TRIOMPHE DU CARROUSEL, PARIS
Partially padded for protection against attack

MENTOR GRAVURES

AMERICAN RELIEF WORKERS CARING FOR PEASANT REFUGEES

•

ALL THAT IS LEFT OF A SCHOOL FOR GIRLS

•

GRAND OPERA HOUSE, PARIS

PARIS, after more than four years of war, smiles through her tears despite the many trying experiences and enormous sacrifices made necessary by the fortunes of the great world struggle now taking place on her soil. It is but natural that many of us should be anxious to know how France looks under war conditions, how the inhabitants carry on, and what changes have taken place. When I arrived in Paris I was greatly astonished to find so little difference in the outward appearance of the city. Here and there monuments are covered with sand-bags to protect them from the bombs dropped occasionally by German raiders. But aside from this outward evidence and the fact that there are numerous American, English and French soldiers to be seen on the various streets and boulevards, one would hardly know that it was war time. There are the same crowds in front of the cafés, though fewer fashionably gowned women. Taxicabs, motor cars and other vehicles still throng the various thoroughfares and give to the city the appearance of an activity but slightly altered from that of peace times.

The inhabitants have become accustomed to the sirens sounding an "*alerte*," the signal for the approach of hostile airplanes. These nocturnal visits, which usually take place near the hour of midnight, occasion but little alarm. Men, women and children dress and make their

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way to a refuge, where they wait in safety until the "all-clear" signal is given. When they return they soon fall asleep and forget that a raid has taken place. When the far distant "Big Bertha" first began bombarding the city, Parisians were bewildered. They scanned the sky for German planes, from which they thought projectiles had been dropped. French airmen searched in vain for the attacking "Gothas," but none were found, and the mystery increased. The theory was advanced that the explosions were caused by aerial torpedoes, but finally the discovery was made that Paris was being bombarded by long-range guns, and since that time the occasional shelling of the city causes but little or no excitement. When a shell bursts no one runs; no one is excited; the women shrug their shoulders, and go their way. If there is loss of life, or damage to property, the people take it stoically and brush aside further comment by the remark, "It is war."

Photograph by E. M. Newman

GARDEN OF THE TUILERIES, PARIS

Showing statue completely covered with protective padding

Conditions in Paris

So little actual damage has been done to Paris that one would have to search diligently for evidences. It is true that a few buildings have been destroyed, some lives have been lost, but, from a material standpoint, the loss is insignificant. Most of the theaters are open and well attended. The popular places of amusement are as crowded as ever, and the cinematograph theaters turn people away every afternoon and night. The real difference in the Paris of today and the city as it was before the war is seen at night, when at 9.30 all lights are extinguished and the streets are in absolute darkness. Cafés are closed, windows are darkened, and lights are not permitted to be seen coming from either resi-

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FRONT OF NOTRE DAME CATHEDRAL, PARIS

The sand-bags, protecting the Holy Art Treasures, have crumbled and are slipping away. Uneasiness about their safety has disappeared

dences or places of business. If one must be out late at night he has to grope his way through the streets, and, unless he is very familiar with the city, his progress is difficult and his chances of being lost almost certain. Even the Place de la Concorde is so dark that one with difficulty locates the monument in its center and from there tries to find his way across the square.

The Latin Quarter is no longer the absorbingly interesting place that it was when students from all over the world came to Paris to study art. Most of the pupils have gone. Few of the models are now to be found on the Boulevard Michel (mee-shell) or in the vicinity of the gardens of the Luxembourg. The students, the poets and the artists have gone to the front, and the Bohemian life for which this quarter was formerly known is for the present but a memory. On Montmartre, where in former years life began at one o'clock in the morning, all is quiet after 9.30, and the places of notoriety, such as the *Chat Noir*, the *Rat Mort* and others, are as quiet as a graveyard. The dancers and the students' balls, the various night revelries, are, for the time-being, done away with.

Chaque ticket quotidien de cette feuille correspond à 100 grammes de PAIN
Les tickets ne peuvent être utilisés qu'au jour indiqué.
30 100 grammes de PAIN JUILLET
29 100 grammes de PAIN JUILLET
28 100 grammes de PAIN JUILLET
Songez à aller chercher votre Feuille de Tickets pour AOUT
27 100 grammes de PAIN JUILLET
26 100 grammes de PAIN JUILLET
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PORTION OF MONTHLY BREAD TICKET
Containing small tickets good for 100 grammes (2 thin slices) each meal. Tickets are good only on the day of their dates

With all this, there is little evidence of sadness, and none of despair. The fear that prevailed in France for awhile that America would not be able to send her soldiers in time gave way to a feeling of supreme confidence. With the Americans in the country in vast numbers, the entire attitude of the people has changed. They go about their various tasks singing. They accept their sacrifices cheerfully and willingly, with a conviction that they have not suffered in vain, and that, torn and shattered as part of the Republic is, victory will make their suffering worth while.

Village Life

Schools in the villages back of the lines have been continued practically as in peace times. In some places where shells fall and at times destroy life and property the little ones attend school in bomb-proof shelters. Where the soil will permit of cultivation, the

Photograph by E. M. Newman
PROTECTION FOR STEAMSHIP OFFICES, PARIS

women and children grow vegetables and garden truck, which is sufficient for their own use, and, as a rule, they are able to sell enough to provide means for a livelihood. Food regulations apply alike to village, town and city. The same restrictions that apply to Paris govern the smallest hamlet. Butter and milk cannot be used except by special permission. Cheese is not permitted to be made unless authorized by the authorities. Sugar is given out in very limited quantities, and there are three meatless days a week.

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POOR REFUGEES JUST ARRIVED IN PARIS
Place de la Concorde

French boys are called for service when they are eighteen years of age, and men are eligible up to the age of forty-seven. Older men may volunteer for special war work, and almost every man who is able to do something toward carrying on the war offers his services. Women are also doing their share, even the women of the streets have enlisted as nurses and are doing excellent work. In every walk of life, in every phase of society, men, women and children are busy doing something,—making clothes for the men at the front, tilling the soil or producing the material that is essential to the prosecution of the war.

Travel Conditions

Travel in France under present conditions has its drawbacks. Automobiles for pleasure purposes may be used only within the city limits, and then by permission only. Touring through the country is absolutely forbidden, except for military purposes. Train service, as in the United States, has been cut down and the cost of travel materially increased. Most of the dining cars have been taken off, and sleeping cars have been abolished on all but a few first-class trains that travel through the south of France.

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CARRYING HOME COAL IN SACKS
In Paris, rich and poor alike, carry their own coal

One cannot go anywhere in the north of France without the sanction of the police. A railroad ticket cannot be purchased to any place in the

prohibited area without a *sauf-conduit* (safe conduct), the traveling pass issued by the Prefect of Police. Drawing a line from Havre across northern France, one would not find above that line a passenger train of any sort that pretends to run on schedule time. All the railroads in this area are congested by troops and ammunition trains, and travel is not only slow but most uncomfortable. In southern France the condition is much better; there are not as many trains as before, but those that run are about as luxurious as formerly, and the running time is nearly as good as in peace times.

In most of the towns in northern France the traffic officers are American military police, and here and there one may find a Broadway "cop" directing traffic just as he did in the metropolis of America. In place of fashionable motor cars, clanging electric street cars and the vehicles seen on the streets of an American city, he is confronted with long caravans of motor trucks on the way to the front filled with troops or supplies, officers' cars, all exceeding the speed limit, and an endless jam of ambulances.

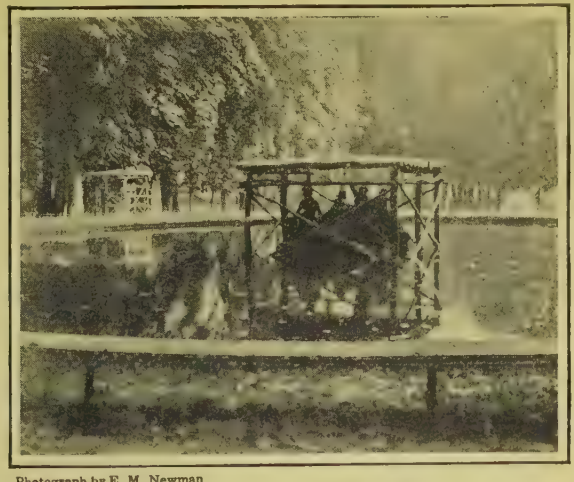
Photograph by E. M. Newman

RED CROSS HOSPITAL BASE, No. 1

Situated at Neuilly, just outside the gates of Paris. This was built with American funds and was presented to the French

Many of the famous hotels at Mediterranean resorts have been converted into hospitals. Some are still open to the public, and they are as crowded as usual. In practically all the resorts the same is true. In Paris some of the large hotels have been taken over by the French, British and American Governments, to be used as headquarters for the different departments of the army and navy.

Gold has disappeared entirely, but there is plenty of silver and copper coin. Paper money is largely used and most people prefer it. There is paper currency for the equivalent of five, ten and twenty cents, as well as much larger amounts. For ordinary purposes and all transactions of business there

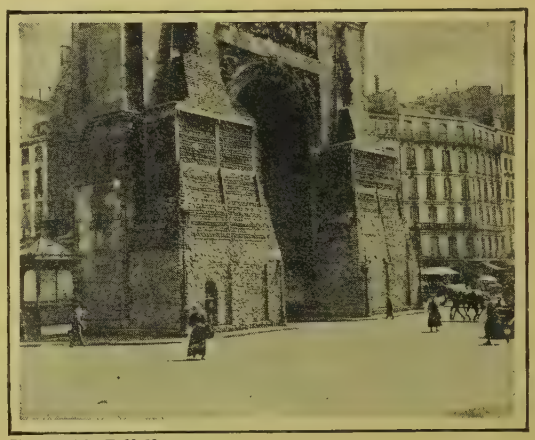


Photograph by E. M. Newman

IN THE PARK AT VERSAILLES

Showing fountains with protective covering

is ample money in the country. No one bothers about gold or silver, paper is just as acceptable, and the credit of the nation is unimpaired as far as the people of France and the world are concerned.



Photograph by E. M. Newman

PORTE ST. DENIS, PARIS

Historic old gateway in its present aspect—thickly padded

Restoring the Land

The devastated section of France represents one of the richest parts of the Republic. At one time its hills and dales were covered with rich foliage, but they are now a mass of shell craters and heaps of ruins marking the sites of once prosperous towns and villages. Much of the damage can never be repaired, as the soil has been so torn and devastated that it is practically valueless. It is possible, however, to rebuild many of the battered towns and to restore to the former inhabitants their homes. Work is now going on toward the restoration of the reconquered territory. Roads are being rebuilt as rapidly as possible, construction continues night and day, and many of the inhabitants have already returned to their villages.

Photograph by E. M. Newman

OLD CHURCH OF ST. GERMAIN-L'AUXERROIS

Showing alarm siren on top of the ancient medieval tower

So patriotic are the French peasants that one rarely hears a word of complaint. They take their losses philosophically, and are frequently seen tilling the soil and harvesting their crops within five miles of the battle lines. I have seen women and children living in villages where most of the houses have been blown to bits by German cannon, and these brave people refuse to leave, preferring to risk their lives in the cellars of their homes rather than to become refugees.

The people of France are not going hungry, because of insufficiency of food. There are restrictions, of course. For instance, one must have bread tickets entitling each member of the family to 100 grammes ($3\frac{1}{5}$ ounces) of bread per meal. That is equal to about two slices. In other words, everyone may have six slices of bread per day, which certainly does not spell hardship. There is very little sugar, and the amount that is permitted to be used per individual is limited. Practically no butter is served in public restaurants or hotels, but for private use it may be obtained in limited quantities. This is also true of cheese. Milk is

exceedingly difficult to obtain, but vegetables are to be had in abundance and there is also a quantity of good fruit. So, on the whole, no one need go hungry, and conditions improve day by day. Compared with pre-war prices, both food and other merchandise have advanced materially. Some things are very expensive, especially shoes and gloves. Women's wear has doubled in cost. On the other hand, wages are very much higher than ever before.

Commercially, one might imagine that France had suffered to a great extent, and while this is true in reference to certain lines of business, representing luxuries or non-essentials, there are other lines that are immensely prosperous. Such cities as Bordeaux, Lyons, Marseilles (bore-doe, lee-ohng, mar-sa′-ee), and a number of others, have more than doubled in population, and have never in their history been as flourishing as now. The coming of so many Americans, the highest-paid soldiers in the world, has brought wealth to many a small shop-keeper who had never dreamed of having so much money. Unlike the French, who earn but little and who have always studied thrift, the Americans are generous with their money. They spend it freely, and, as a result, the smaller shops, the cafés and places of amusement are reaping a golden harvest.

Photograph by E. M. Newman

FOURTH OF JULY IN PARIS

Selling American and French flags and patriotic emblems on the Place de la Concorde. A protected monument is seen in the background

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THE MOST LUXURIOUS LAUNDRY OFFICE IN THE WORLD

The City Hall of Lyons turned to laundry service for wounded soldiers

Many Americans who have not been abroad since the war are under the impression that the shops of Paris are closed, that business is at a standstill, and that financial ruin is facing the business men of the city. As a matter of fact, some of the stores

are doing more business than during peace times, because of the increased income of the working people, who are now able to buy many things that were out of their reach in former times. The hotels are crowded, not with tourists as formerly, but with officers and business men. Socially, there is but little going on besides affairs for charitable purposes. Receptions have been abandoned, and social functions placed under the ban until after the war. The society women of France are today largely engaged in welfare work, looking after the orphans, caring for the thousands of refugees who have had to abandon their homes during the German invasion. The women of the middle and lower classes are working on farms and in munition factories; they have taken the places of men employed in business establishments, who have been compelled to go to the front. There are no idlers. Everyone is doing his or her bit.

From photograph by the American painter, Harry B. Lachman. By permission of the American Committee for Devastated France

A RELIEF WORKER IN A MIDDLE-CLASS HOME IN CHATEAU-THIERRY

France, after four years of war, shows no sign of discouragement, nor of financial disaster.

Several times Paris has been in danger, and every time the danger threatened the people became more determined to save the capital from destruction. Once it was necessary to move to Bordeaux, and, to make certain that the Louvre (loov-r) would not be robbed of its treasures, they were removed.

From photograph by the American painter, Harry B. Lachman. By permission of the American Committee for Devastated France

HOME AGAIN

After the departure of the Huns

From photograph by the American painter, Harry B. Lachman. By permission of the American Committee for Devastated France

WAYSIDE HOSPITALITY

The walls in the wonderful Rubens gallery are now blank and empty. The masterpieces, some of the most valued paintings in the world, have been taken to places of safety. Even the Venus de Milo no longer stands on her pedestal, and the alcove in which she has so long reigned as queen is now vacant. But all of these precautions were merely safeguards, and now that all danger of the taking of Paris is passed, the inhabitants have returned to their various vocations,

and life goes on almost as before the war. It will take only the turning on of the lights at night to bring back the gay appearance of former years.

War-Made Cities

The world has marveled at the rapidity with which America transported soldiers across the Atlantic. Few perhaps realize the stupendous task and the enormous amount of work that was necessary to prepare for the coming of such a huge army of men. Several thousand miles of railroad had to be constructed. Innumerable buildings were erected to be used as warehouses, barracks, hospitals, and for countless other purposes. Whole cities have been built in the heart of France, to be used as assembling depots, distributing plants, and for other war purposes. In one of these new cities there are 300 miles of railroad tracks and hundreds and hundreds of great buildings storing millions of tons of material. In one building is a gigantic bakery. Another structure contains the second largest refrigerating plant in the world. In still another, from six to seven Baldwin locomotives are assembled every day, and these enormous engines are being turned out on an average of eighteen hours each.

Photograph by E. M. Newman

MEETING THE LABOR PROBLEM IN FRANCE

Soudanese laborers employed in road work

From end to end of France one sees American camps and troops billeted in almost every town and village. It is splendid to observe how the Americans fraternize with the peasantry of the Republic, and touching to see how solicitous are the peasant women for the welfare of the American soldier. Many of them have lost their own sons, and they refer with pride to the strapping American boys billeted with them as "Our boys"; they are as proud of these boys from across the ocean as they were of their own sons whose places the Americans have taken. That the American soldier appreciates the devotion of their foster mothers is seen in their anxiety to help them carry water, split wood, and relieve them of many of the burdens that war has thrust upon women.

Some learn French, others have given it up as a hopeless task. I was amused when one day, in a remote village near the front, I met two travel-weary American boys mopping their brows and evidently lost; they asked

Photograph by E. M. Newman

UNCLE SAM'S LOCOMOTIVES IN FRANCE

me where they were. I gave them the name of the nearest town. They seemed bewildered, and I asked them where they were billeted. Poor fellows, they looked at me in blank astonishment and said, "That's just it; we don't know how to pronounce the name of the place, but we would know it if we saw it." They had gone for a short walk, lost their way, and had wandered about all day long trying to find their way back to quarters. By mere chance they told me of a ruined mill in the town in which they were billeted, and I was able to locate it and send them back rejoicing.

From photograph by the American painter, Harry B. Lachman. By permission of the American Committee for Devastated France

WORKING ON A REFUGEES' COLONY FARM

Working Toward the Front

After the Americans first land in France, they are for weeks and months kept far behind the lines, drilling and preparing for work at the front. Slowly they are moved nearer to the fighting line. Some of the anxiety of the fathers and mothers in the United States might be relieved if they realized that their boys are not long in great danger. Even after arriving in what is called the "advance zone" they are not sent into action until they have had experience in the trenches, and this may take another period of time varying from weeks to months. Even in the trenches there may be successive quiet days when hardly a shot is fired. During a "push" the boys have their most trying experience, for they are then under artillery and machine-gun fire. But they are not kept for any great length of time fighting under conditions which test the courage and endurance of the strongest men. As soon as possible those that have been in the thick of the fight are relieved and sent to the rear to rest and recuperate. Every effort is made by commanding officers to spare their men all they can, and no safeguard is overlooked for the protection of the soldiers.

From photograph by the American painter, Harry B. Lachman. By permission of the American Committee for Devastated France

DISTRIBUTING DEPOT OF THE AMERICAN COMMITTEE FOR DEVASTATED FRANCE

Refugees having their histories recorded
Children receiving toys

There are many hours of drilling and instruction in the art of war. Men are made as physically fit as is humanly

possible. Sanitary conditions and the morality of the men are even more carefully guarded than were they at home with their parents. The watchful eyes of the officers are ever upon them.

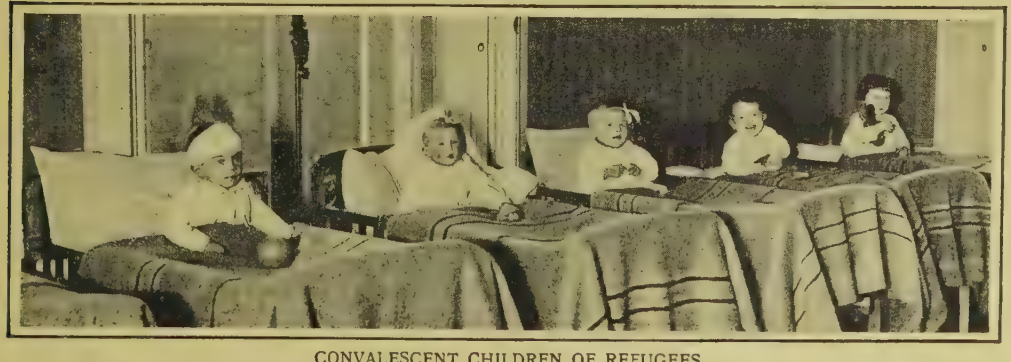
The American soldier has proved that he is a fearless, even reckless, fighter. Although practically inexperienced, from the time of his first real participation in the World War, the morale of the Allies has undergone a marvellous change. It was the turning point in the great struggle. The Allies had been fighting nearly four years when the Yanks made possible the overwhelming Allied offensive which drove the Germans back in a crushing defeat that swept from them all they had gained in a year's fighting.

France and America

In this great allied war enterprise America and France have been united as never before. They have always been in spirit, and even in character much alike. The artistic temperament of the French, their love of pleasure, their enthusiasm and sentiment, mingle strangely but well with the demonstrative, ambitious and energetic nature of the American. Both have the same love for liberty, independence and freedom of thought and action. One of the best investments France ever made was the support that, through the inspiration of Lafayette, she gave to the United States. It never has and never will be forgotten. It is a vital part of United States history, something that has always been realized and dwelt upon, and has brought the two republics close together.

From photograph by the American painter, Harry B. Lachman By permission of the American Committee for Devastated France

FRENCH CHILDREN STUDYING THE WAR MAP



CONVALESCENT CHILDREN OF REFUGEES

They have learned to "smile, smile, smile." A bright feature of the welfare work of the Red Cross

THE OPEN LETTER

Dear Mentor: This is not a complaint, for there is nothing to complain of in connection with The Mentor.

My friends, several of whom are subscribers to this most worthy educational magazine, are particularly interested in music and painting, and it is so long since these have been treated in The Mentor that I was requested to write whether there was any way in which you could favor us on these subjects.

Don't for one moment think that those we have been getting have not been fully appreciated. It is just that we are a little hungry for our particular *likes.*

A SUBSCRIBER.

That is a very nice, friendly letter — the kind that we always like to find in our mail. I wish that the writer had signed his, or her, name, so that I could have written a direct personal letter in reply. As it is, however, it gives me an opportunity to tell all the readers of The Mentor something about future numbers. It is true that we have had no music number for some time—not since last February, when we published "The American Composers." We have two numbers on musical subjects almost complete, but we have set them aside temporarily in favor of numbers dealing with subjects that make a commanding claim on the attention of every one today. As for art, we have had five numbers during the twelve months past, varying in subject from Corot and Russian Art to the art of Photography—and there has been plenty of art in the illustrations of many numbers devoted to subjects other than fine art.

★ ★ ★

In laying out The Mentor schedule we take into account that we are living in the most important, vital period of the world's history, and shape our plans accordingly. One hundred years from now the reader of history will no doubt think of 1918 and 1919 as years when the peoples of Europe, Asia and America were engaged solely in warfare and the manifold activities that war entails. If this copy of The Mentor should happen to fall into the hands of such a reader, what an interesting light on our times would come to him as he read the request of Mentor readers for *more music and art!* The world is a big affair—bigger than most of us realize. It has room for war in its most gigantic, cruel and shocking form, yet, within the very zone of war, as Mr. Newman points out, it also has room for music and art—and we find humanity pursuing its various avocations and seeking its customary pleasures under the bombardment of distant siege guns and hovering airplanes. It is only natural, then, that American readers, in the midst of the hurly-burly of war in town, city and camp, should ask for music and art. In the overheated atmosphere of the time, music and art appeal to us as refreshing draughts.

THE Y. M. C. A. IN FRANCE

The work of the Y. M. C. A. organization, like that of The Red Cross, is to be seen everywhere, and its activities are many and varied. The building at the left is the Y. M. C. A. headquarters in Dijon (dee-zhohng)

★ ★ ★

Here, then, is a little information as to music and art in future Mentors. Our next number will be one of unique art interest. Chinese painting is the subject, and it is treated by Mrs. Francis Ayscough, for years a resident of Shanghai and a student and collector of rare and valuable Chinese paintings. The illustrations are reproductions of wonderful old Chinese paintings. Then, in a few weeks, we shall publish "Women Sculptors of America," by the distinguished sculptor and art critic, Mr. Lorado W. Taft. That will be followed later by a number on those two French painters of luxury, Fragonard and Watteau, and then one on Leonardo da Vinci. So much we promise on art in the early future. Music will be represented soon in a number on "The Opera in France." And, you may be sure, there will be a wealth of other good things besides.

W. D. Moffat

IN THE POSSESSION OF MRS. ALBERT G. MILBANK, HUNTINGTON, L. I.

HOME OF LI T'AI-PO—BY LI YUNG CHIH

CHINESE PAINTING

The Home of Li T'ai-po, By Li Yung Chih

ONE

LANDSCAPES are very often ideal sketches of the homes of favorite poets, or they depict scenes where poets are entertaining their friends and are enjoying beautiful views in company with men that have tastes similar to their own. The painting reproduced here in gravure is an exquisite work in the style of Chao Ch'ien-li, who was noted for his landscapes in "shades of dark and light green;" a river winds into the far distance, and in the foreground stands the house where lived Li T'ai-po, the greatest poet China has produced. One of the smaller illustrations is of the home of Tao Yuan-ming, known as the "scholar of the five willows," because five willows, which are seen in the picture, stood in front of his door.

Li T'ai-po (A.D. 705–762) was a native of Ssuch'uan; shortly before his birth his mother dreamed of the planet Venus, "T'ai Po," and for this he was duly named. At the early age of ten he had written a "stop-short" to a firefly, which ran as follows:

Rain cannot quench thy lantern's light,
Wind makes it shine more brightly bright;
Oh! why not fly to heaven afar,
And twinkle near the moon—a star?

When he had attained man's estate, he developed a love of adventure which caused him to wander throughout the empire. In Shantung he formed the hard-drinking coterie known as "the Six Idlers of the Bamboo Brook," and when he reached Ch'ang-an his poetry attracted the notice of Ho Chih-chang, who declared that he was a "banished angel" and introduced him to the emperor Ming Huang. The latter was charmed with his verses, prepared a bowl of soup for him with his own hands, and at once appointed him to the Han-lin College. Li Po then gave himself up to a career of wild dissipation, for which Ming Huang's court offered abundant opportunity. On one occasion when the emperor sent for him, Li was found lying drunk in the street; and it was only after having his face well mopped with cold water that he was fit for the Imperial presence. His talents, however, did not fail him. With a lady of the harem to hold his ink-slab, he dashed off some of his most impassioned lines, at which the emperor was so overcome that he made the powerful eunuch, Kao Li-shih, go down on his knees and pull off the poet's boots. Kao, of course, could not brook this insult, and set to work to persuade Yang Kuei-fei, the reigning favorite, in whose honor Li Po had penned some immortal lines, that she was being perpetually held up to ridicule. Consequently, when the emperor wished to appoint Li Po to some important post, Yang Kuei-fei intervened, whereupon Li Po, with seven of his friends, begged to be allowed to withdraw from court. Their request was granted by the emperor, who gave them a large present of money, and they departed to form a new coterie known as the "Eight Immortals of the Winecup." It was at this period of his disgrace that Li penned the lines:

My whitening hair would make a long, long rope,
Yet would not fathom all my depth of woe.

After more wanderings and much adventure, he was drowned on a journey from leaning one night too far over the edge of a boat in a drunken effort to embrace the reflection of the moon. The following lines are a good example of his work in later years:

THOUGHTS IN A TRANQUIL NIGHT

Athwart the bed
I watch the moonbeams cast a trail
So bright, so cold, so frail,
That for a space it gleams
Like hoar frost on the margin of my dreams.
I raise my head—
The splendid moon I see.
Then droop my head,
And sink to dreams of thee,
My Fatherland, of thee.

Tao Yuan Ming (A. D. 365–427), a youth of wide reading and great ambition, was compelled by poverty to become an official underling; but after a short time he resigned and went home, where he made himself ill by overwork in the fields. Subsequently he was appointed magistrate at P'eng Tse, Kiangsi, but held this post only eighty-three days, objecting to receiving a superior with the usual ceremonial on the ground that "he could not crook the hinges of his back for five pecks of rice a day." He then retired into private life, and occupied himself with poetry, music and the culture of flowers, especially chrysanthemums. In this pursuit he was assisted by his wife, who worked in the back garden while he worked in the front. His poem on retirement, "Home Again," is considered one of the masterpieces of the language.

PREPARED ESPECIALLY FOR THE MENTOR BY MRS. FRANCIS AYSCOUGH
ILLUSTRATION FOR THE MENTOR, VOL. 6, No. 20, SERIAL No. 168
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IN THE POSSESSION OF MRS. WILLIAM H. MOORE NEW YORK

THINK THRICE, THEN ACT—BY CHAO CHANG-MU

A DIVISION of Chinese painting more popular, perhaps, than any other is that known as "birds and flowers." No people are more fitted to reveal the hidden beauties of flowering plants and trees or the characteristic forms and colorings of the feathered hosts than are the inhabitants of the Flowery Kingdom. The Chinese are passionately fond of both birds and flowers. Even in these progressive days one may see in any town in China groups of elderly gentlemen, cages in hand, solemnly wending their way to some point of vantage on the city wall where they can "air the bird;" when the blue curtain which ordinarily covers the cage is lifted, in an ecstasy each proud owner listens to the sweet strains that pour from his songster's throat. The cages used for these much loved birds are very fine, those belonging to the rich being elaborate in the extreme.

Flowers, too, are given much attention. To each season of the year is assigned an appropriate blossom, the tree peony to spring, the lotus to summer, the chrysanthemum to autumn, and the prunus to winter; paintings in sets of four symbolizing the "four seasons" are most popular. At these seasons flower shows are held, where men of taste meet to discuss the comparative merits of the plants on view. These shows do not in the least resemble those held in the West. The arrangement is most artistic. The plants, grown in pots of exquisite colorings, are placed on high stands of blackwood, perfect in form, and are thus isolated one from the other, that they may be seen to the greatest advantage.

When one considers that, in China, painting has been looked upon as a fine art for two thousand years and more, one does not marvel that certain forms have become traditional. In fact, there is no more striking characteristic of Chinese painting than this element of traditional convention. Certain groupings of birds, beasts and flowers convey instantly to the Chinese mind certain meanings, poetic or instructive, as the case may be.

The beautiful painting, reproduced in gravure, by Chao Chang-mu, an artist of the Yuan dynasty, suggests to the most casual observer a charming spring scene. To the Chinese scholar, however, it carries a further message. The three white egrets surrounded by emblems of spring, peach trees in full bloom and willows in young leaf form the centerpiece of most exquisite composition, the hidden meaning of which is provided by the homonym existing between *ssŭ*, egret, and *ssŭ*, thought,—words of the same sound written with different characters. The implication is that before action one should take "three thoughts."

As three egrets convey the meaning "think thrice—then act," so nine egrets, an arrangement also often seen, suggests the saying, "the scholar reflects nine times." These two groupings have become traditional, and have been treated, through the centuries, by different artists, in countless ways.

Another traditional bird study and one very often seen is that of the "Five Cardinal Relations among Mankind"—the relations being those of Sovereign and Subject; Father and Son; Elder Brother and Younger Brother; Husband and Wife; Friend and Friend.

It may indeed be laid down as a general statement that groupings of birds and flowers are almost always intended to convey some subtle meaning; in some cases the sense of the allusion has been lost, but it is safe to assume that it once existed.

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MAY LONGEVITY, CONJUGAL FELICITY AND PROSPERITY BE YOUR LOT

DURING the Ch'ien Lung period of the Manchu Dynasty (1735–1795) there traveled to Japan a Chinese painter, Shen Nan-p'in by name (in Japanese, Chinanpin), who established himself in the Land of the Rising Sun, and there taught his art to the inhabitants, who listened with devout attention to his lightest word. His teaching is still revered, and his works are treasured. The painting here reproduced, a very beautiful specimen of his art, is a congratulatory scroll in full color on silk, painted for presentation to an elderly couple on some festal occasion. It conveys the wish, "May longevity, conjugal felicity, and prosperity be your lot." The bul-buls stand for longevity, the ducks for conjugal felicity, while the pomegranate laden with fruit indicates prosperity, posterity and all good fortune.

The mandarin ducks appear very frequently as emblems of conjugal fidelity, and are constantly referred to as such in poetry and in prose. A famous story, often told, is that of a most devoted couple, Han Pēng and his lovely wife, who lived long years before our era. The tyrant of the day cast longing eyes upon the beautiful woman and decided that Han Pēng would be conveniently disposed of were he cast in prison. This sentence was carried out, and the unfortunate man there committed suicide. In the meanwhile his wife was placed in the harem of the ruler, who lavished favors upon her. One day he insisted that she accompany him to the top of a high tower; she meekly obeyed, but, to his horror, cast herself from the summit and lay, a mangled heap, on the stones below. In her girdle was found a note begging that her body might be laid in the same vault as that of the husband she loved so well. The enraged tyrant refused to grant this favor, and the bodies were laid in separate graves. To the amazement of onlookers, two trees were seen to spring, one from each tomb, and when they had attained a sufficient height, they were seen to bend over and join their branches as if in a fond embrace. Above these, two mandarin ducks circled, chanting a mournful dirge. Paintings of these "trees of love" are often seen.

The various denizens of the feathered tribe convey to the cultivated Oriental different allusions, thus: the bul-bul is often seen in what is known as a "white head" scroll. The figure of the bul-bul with his snowy top-knot is supposed to convey to elderly people the wish, "may you grow old and white together."

The golden pheasant symbolizes the wish that the brothers of a family may live together in peace and harmony; the Chinese use the expression "to add flowers to the embroidery" when they refer to such a wish. In the province of Kiangsi, there runs a legend that a pearl merchant was on the point of being ruined by the intrigues of his faithless wife, when the true state of affairs was made known to him by a speaking parrot. In that province the bird has since been looked upon as a warning to wives to be faithful to their husbands.

The magpie is the bird that announces joyful news, while the wild goose is said to be peculiarly the bird of the Yang or principle of Light and Masculinity in Nature. It follows the sun in his wintry course toward the south, and shows an instinctive knowledge of the times and seasons in its migrations. It always flies in pairs, and is hence employed as an emblem of the married state. The picture of "geese and rushes" by Pien Shou-mien, a noted artist of the Ch'ing dynasty, is ornamented by a poem written in fine running hand. The frontier moon shines on a scene of desolation; the frontier grasses stretch across an endless plain; the border river is frozen hard. The birds will follow the sun; to the south of the river the mists rise from scenes of beauty. They will guzzle the wild rice, they will there disport themselves, they will fly in a phalanx as if writing the character for "heaven" on the blue of the autumn sky.

The stork or crane often appears alone or in company with various members of the immortal hosts who inhabit the "western heavens." It is one of the most popular emblems of longevity.

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IN THE POSSESSION OF MISS FLORENCE WATERBURY, NEW YORK

THE AMAZON HUNG HSIEN—BY TS'UI YEN-FU

ONE of the recognized and most familiar divisions of Chinese painting is that of "Ladies." Artists depict the heroines of history and romance, the denizens of that fabulous region known as the Western Paradise, which is situated among the Kun Lun Mountains, as well as the goddesses of the various faiths. In Paradise, so runs the legend, the "Western Empress Mother" holds her Court, and here assemble the immortals and all the fairy host. Driving his chariot drawn by eight horses, came Mu Wang, one of China's early rulers, to visit her.

The fairy Ma Ku, the sister of a well known alchemist, who was herself an adept of the black art, journeys to the Western Heavens and brings thence the peaches of longevity, peonies, the flowers which confer wealth, and the *ling chih*, or fungus of long life. She is perhaps the most popular of all the fairy ladies, and is shown under all possible conditions. In the illustration we see her standing beneath a pine tree, attended by a maid servant and the faithful deer which accompanies her that he may carry back the fruits and flowers she has gathered. She is about to pour a libation to the gods from the exquisite cup which she holds in her hand. Her costume is most lovely, the coloring of the original being truly marvelous; a cloak of vivid blue falls over an under skirt of mauve, while a beautifully embroidered shawl is held in place by a white jade buckle. In her hair she wears dainty ornaments of the "kingfisher feather enamel," made even today in Canton; around her neck is hung a circlet of gold which "locks her to life." (These circles of precious metal, silver or gold, are used at the present time by parents who wish to guard their children against the dangers of the spirit world, and therefore hire a priest to "lock them to life.") Both Ma Ku and her attendant, in the picture we are studying, wear broad girdles of leaves; in fact, their costumes are very similar. There is, however, one important difference to be noted: whereas the garments of the attendant hang in heavy natural folds, those of Ma Ku float as if blown by a strong wind. This is a convention always used by the Chinese artist when he wishes to paint ladies possessed of supernatural powers. One can, therefore, always differentiate the immortals from the heroines of history or romance.

An immortal who rivals Ma Ku in popularity is Ho Sien-ku, stated to have been the daughter of Ho Tai, near Canton. She used to indulge in solitary wanderings among the hills and, rejecting the food of ordinary mortals, ate powdered mother of pearl, which was supposed to produce immortality. Among the heroines of history Hung Hsien is perhaps most often seen.

During the T'ang dynasty the high provincial officials known as Chieh Tu Shih, were extremely powerful, and often indulged in warfare for their own ends. Now Hung Hsien, a waiting maid in the house of Hsieh Sung, the Chieh Tu Shih of Luchou, was possessed of miraculous powers, and when the grievous news was brought to her master that a powerful chief of Wei Po had chosen 3,000 brave and strong men, preparatory to making an irresistible raid upon Luchou, she bethought herself of how she might aid Hsieh Sung in his dire distress. Sallying forth under the cover of night, she journeyed to the Yamen of T'ien Cheng Ssŭ and, by becoming invisible, was enabled to take from his bed a small box of great value. Bearing this, she hastened back whence she had come, accomplishing the journey of several hundred *li* between nightfall and dawn. The grateful Hsieh Sung thereupon despatched the box by the hand of a trusted messenger to his dreaded enemy, who, realizing that he had had a narrow escape with his life, and that if he persisted in his attack he would be obliged to cope with powers more than mortal, made friendly overtures to Hsieh Sung, and abandoned all thought of attacking Luchou.

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KUAN-YIN, THE "GODDESS OF MERCY," DISGUISED AS A DEMON

THE "Goddess of Mercy disguised as a demon" is a Buddhist painting of the Lama School in full color on silk. The most complete story of Kuan-yin *pusa* is found in the Lotus Scripture; a translation from this book runs as follows. "Once the Sage Wuchini rose from his seat and, removing his robe from his right shoulder, folded his palms and said: World-honoured One, why is Kuan-yin called the hearer of prayers? God answered him: Good man, if innumerable beings are suffering all sorts of troubles, and with all their hearts call on Kuan-yin, Kuan-yin immediately hastens to deliver them. Whoever lays hold of this Name, even if he enters a great fire it will not burn him. This is because Kuan-yin is a Divine power.

"She has thirty-two transformations, among others the following: devas, dragons, night-goblins, men and not-men; Kuan-yin appears like them and preaches the law to them." Kuan-yin has this Divine power of choice in herself, voluntarily to come to save this evil world.

In the painting before us the *pusa* appears from a circle of flame as a terrifying being with six arms. The entire symbolism of the composition is difficult to explain, but from a circle above the monster peers forth the head of Amitabha, whose spiritual Word is Kuan-yin. Many images of the latter are represented with a miniature image of Amitabha Buddha in the front of the crown or head-dress, thus signifying the intimate connection between the two.

Avalokitesvara, in a mystical sense the son of Amitabha, is one of the Buddhist Trinity and is placed in temples, to the left of Amitabha, the central figure. During the ages, in some obscure manner, the sex of the deity has been changed and Avalokitsevara appears in Chinese Buddhism as Kuan-yin, the Goddess of Mercy, the Giver of Children, and is doubtless the most popular member of the Buddhist pantheon. According to R. F. Johnston, the eminent authority on Buddhism, there exists what we may call a romantic story of Kuan-yin as well as a scriptural one; and it is doubtless the romantic story that is nearest the heart of the Buddhist laity. This narrative, which is much too long for insertion in these pages, is simply a religious fairy-tale, and narrates the noble and virtuous deeds of the *pusa*, and the terrible persecutions to which she was subjected during the life she spent on earth as the youngest of the princesses, the daughters of a certain great king. According to writers who contribute prefaces to modern editions of the story, it was composed during the reign of the Emperor Hui Tsung of the Sung dynasty, by a monk named P'u-ming, to whom the tale was unfolded by a mysterious apparition.

At the island of Pu-to in the Chusan archipelago, is established the largest shrine dedicated to Kuan-yin within the confines of China, and here assemble annually hundreds of pilgrims who pay homage to the beneficent goddess.

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THE JOY OF LIFE—BY HSÜ KU, AND PLUM BLOSSOMS BY MOONLIGHT—BY FANG HSUEH-PO

THE question of modern Chinese art is one of interest. When one considers the masterpieces of those ages when the civilization of China was without doubt the greatest in the world, when she had no rivals, one is inclined to think that nothing produced since those days is worthy of consideration. A study, however, of fine modern work brings a modification of such a view.

Art reflects the spirit of the age; the magnificent landscapes painted during the T'ang and Sung periods were the poetic visions of men who lived in the halcyon days ere the art of leisure was lost, when poets, painters and musicians were "numerous as sand." Through the succeeding dynasties of the Yuan and Ming and during the early days of Ch'ing, the same calm spirit prevailed engendered by a highly developed civilization surpassing all those with which it came in contact. With the advent, however, of the virile, vigorous European who, early in the nineteenth century, insisted that the barriers, hitherto inviolate, should be lowered, a new spirit was infused into Chinese thought. The superiority of this civilization began to be questioned· no longer was the "Son of T'ang" convinced that his point of view was indubitably superior to that of all creation. Doubts arose. Parties which demanded progress on Western lines contended with those which claimed that the only hope of salvation lay in adherence to the ancient forms hallowed by Time.

In the mad revolt against the modern spirit known as the Boxer Rebellion, one last attempt was made by those who represented the forces of reaction to push the Western barbarian into the sea, one last attempt to preserve the well worn structure still in use.

The attempt failed. Today China is in mad career on the path of material and industrial progress; there is no time or thought for art. When the Renaissance dawns, in which all lovers of China firmly believe, the forms of expression assumed will undoubtedly be different from those we have known; what they will be none can foretell. The pictures painted by men who died just before the fateful year 1900 are especially interesting in that, although untouched by any influence of Western technique, they reveal the restless spirit which prevailed at the end of the century, and to all who look forward to the Renaissance their freshness and virility must bring hope of things that are to be.

The art of China is not dead when men can produce paintings like the squirrels of Hsü Ku, or the Geese and Rushes of Pien Shou-mien.

Two pictures by artists of the modern school are reproduced: "The Joy of Life," by Hsü Ku, and "Plum Blossoms by Moonlight," by Fang Hsueh-po. The latter is a beautiful example of the union of painting calligraphy and poetry. The little poem in the corner, which is written in fine "grass character," runs:

The east wind last night brought cold in its train,
I draw the plum blossom in its marvelous beauty;
The tree, too, is exquisite, shining with glittering frost,
While the tips of its branches are outlined against the circle of the lovely moon.

Hsü Ku, of the Ch'ing Dynasty (A. D. 1840–95) was, during his early life, an official and acquired wealth and influence. The waywardness of a son brought, however, increasing despair, and at length, brokenhearted, he became a Buddhist priest, wandering from monastery to monastery, thus traveling the length and breadth of the empire. Much of his time was spent in the province of Ssŭch'üan, where the mountain scenery made a great impression on his sensitive soul, and disposed his mind to poetry, philosophy and painting. For many years Hsü Ku was a priest at the Kuan Ti Miao, or temple of the God of War, situated near the west gate of the native city in Shanghai, and well known as one of the notable sights of this ancient region.

Hsü Ku painted continually, his subjects being principally studies of bird life and charming floral sketches, though he occasionally painted landscapes of distinction. His seal, as seen on the paintings, bears the legend, "the straw hut with the view of the seven peaks," and probably originated during the years of his isolation in Ssŭch'üan.

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THE MENTOR · DEPARTMENT OF ART
SERIAL NUMBER 168

BUL-BULS
"May you grow old and white together"
By Ch'ien Chao T'ing

CHINESE PAINTING

By

MRS. FRANCIS AYSCOUGH

Resident of China for many years and Collector of Chinese Art

MENTOR GRAVURES

PLUM BLOSSOMS BY MOONLIGHT
By Fang Hsueh-po
and
THE JOY OF LIFE
By Hsü Ku

MAY LONGEVITY, CONJUGAL FELICITY AND PROSPERITY BE YOUR LOT
By Shen Nan-P'in

KUAN-YIN, THE "GODDESS OF MERCY," DISGUISED AS A DEMON

THE AMAZON HUNG HSIEN
By Ts'ui Yen-Fu

THINK THRICE, THEN ACT
By Chao Chang-Mu

HOME OF LI T'AI-PO
By Li Yung Chih

MAGPIES OF THE CH'ING PERIOD
The bearers of joyful news
By Ch'ien Chao T'ing

IF Art be indeed the fine flower of Man's spirit, we must, in order to appreciate the blossom, learn to recognize the tree that bears it, we must realize what nourishes the root from which it springs. Thus the first step in the study of Chinese painting should be a realization of the fact that in the Far East the arts of calligraphy (handwriting) and painting are intimately allied, and that to these twin arts that of poetry must be added. To the Chinese mind it matters not whether one *writes* a poem or *paints* one, the mental process is the same; as no attempt is made to reproduce faithfully an actual thing, and no attempts to suggest light or the modeled form are indulged in.

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Chinese painting, especially landscape painting, is a poetic vision. In China, the written scrolls called "*Tzû Hua*,"* or "character" pictures, are fully as popular as are painted ones; a beautiful thought presented in exquisite handwriting is the quintessence of subtle elegance to the Oriental mind.† (See page 12, "The Emperor Returns from the South.") As the origin of Chinese painting is to be found in the beautiful symbols of the written language, it seems best to commence a review of Chinese painting with a glance at the history of writing.

TAO YUAN-WING, THE FAMOUS POET, AND HIS ATTENDANT
By Wang Shu of the Ch'ing period

Origin of Handwriting

Tradition relates that in the earliest days men recorded events by tying knots in cords, which method, of course, soon proved inadequate; then inspiration came to someone—his name is not given—and we find events and tallies recorded by notches cut on strips of bamboo or wood. Notches in their turn proved inadequate, and, at last, true writing, though in a pictorial sense, was born. This great invention is attributed to an individual named Ts'ang Chieh. Every Chinese schoolboy knows the couplet: "Ts'ang Chieh made characters, Ts'ai Lun made paper." He observed "the shapes of things in Heaven, the forms of things on earth, the foot-prints of the birds and beasts on the sands and mud." The idea flashed into his brain, and the art of writing was created. The historians say "all Nature was moved, Heaven rained millet, the demons wailed in the night, the dragons hid themselves in the depths." The evolution of writing proceeded in an orderly manner, pictograms (picture writings) were succeeded by ideographs (idea writings), by which abstract ideas were expressed, and then came the greatest invention of all, an invention which made the Chinese script a language, and the writing of history, poetry and philosophy possible. This invention was of the "phonograms." The Chinese language is monosyllabic, each ideograph represents a sound. Now sounds are limited in number, and ideas are not, so some device was necessary to provide a method of differentiating "ideas." Some genius, whose name is unknown, conceived the brilliant scheme of combining a written character representing a sound—that is, a phonetic character—with a character representing an idea, thereby obtaining unlimited scope for expression. Thus the sound for "work" being *kung*, and the sound for "water" being also *kung*, he combined the symbol for work with that for water and formed a character which conveyed the meaning, "river" ("working water").

* Compare this with Dr. Ferguson's "*shu*" and "*hua*" on the opposite page.

† Paléologue points out that "the very nature of Chinese writing imposes upon him who wishes to trace its characters as much study and training of eye and hand as painting demands. The strokes have a fineness, a flexibility, just such abrupt endings, graceful curves, sudden energies and gradual shading as only a long practice of the use of the brush can give."

The invention of phonograms was heralded by no fall of heavenly millet, no wail of nocturnal spirits, the inventor's name is unknown, his brow ungarlanded; but his spirit, in the World of Shades, may rejoice at the importance of his invention. Whereas the pictograms number but two or three thousand, the phonograms amount to over fifty thousand; and while the ancient name for pictograms, *wen*, stands for literature, *tzŭ*, standing for phonogram, character, or written words, means "begetter" and is applied to phonetics, because of their power of combination with pictograms to form new words.

These characters were originally executed with a sharp instrument or "knife pen" upon tablets of wood or of bamboo. It was not until about B. C. 221 that Shih Huang Ti, or the First Emperor (the intrepid founder of United China, who earned the execration of Chinese literary men by ordering the "burning of the books"), despatched his trusted general, Meng Tien, to the Northern Marches that he might there superintend the building of that most marvelous of the works of man, the Great Wall; and Meng Tien it was who, according to tradition, invented the writing brush.

This brush was made with a handle of wood; it was of deer's tail within, of rabbits' fur without, and was the forerunner of the brush used today for writing or for painting. The intimate connection between these two arts is well argued in an interesting article by Dr. Ferguson. He writes of a Chinese book called "Ink Remains":

GEESE AND RUSHES
By P'ien Shou-mien, Ch'ing period

"The title of this book impresses a foreign reader as peculiar, but it has the most familiar sound in his language to a native of China. Chinese speak of 'ink' in phrases where we say 'pen.' The 'power of the pen' would be written by Chinese as 'the power of ink.' Literary product is the product of ink—not of the pen.

"The copy of the book owned by me is in four volumes, two of which are devoted to records of writing ('*shu*'), and two to paintings ('*hua*'). The association of writing and painting is taken for granted in the classification of '*shu*' and '*hua*' as common products of ink. In this association which is met with in all books on painting in the Chinese language, we see at once that painting is linked with writing, *i.e.*, calligraphy, and not, as in Europe, with sculpture or architecture. This distinction is fundamental in the study of the pictorial art of China. Only confusion and disappointment can come to one who approaches this study from the same viewpoint as he uses for the understanding of the productions of European artists. In China, he must always remember that painting is the work of cultivated men of literary instincts, and not of men trained in schools of painting. The poet and painter are men who, in addition to being students and calligraphists, have imagination and inspiration.

They are not of a separate class from other literary men, but have talent above their fellows.* The ink used for writing poems is the same as that for sketching the mist on the hilltops, and is not different from that used in ordinary writing. Ink remains, therefore, are literary remains; only it must be kept in mind that the word 'literary' must be widened in its meaning so as to include calligraphy and painting."

Development of Chinese Painting

Painting was an offshoot of handwriting. The beautiful characters, originally pictures, are formed with the same swift, sure strokes of the brush as are valued in pictorial art. We see that Chinese painting in its present form had its rise about two hundred years before Christ.

THE HOME OF MEI YAO-CH'EN
By T'ang Yin of the Ming period

Nature Worship

In considering Chinese painting, the distinctive attitude which the Oriental assumes towards Nature must be taken into consideration. Here, indeed, lies the very crux of the matter. Whereas to the individualistic West, man is the center and lord of the universe, he is, to the more integral East, only one of the component parts of Creation. The philosophy which since the days of the I Ching (written by Duke Wen of Chou, before 1122 B. C.) has directed the evolution of the Chinese mind, considers "every being in the world, every manifestation of Nature, every spirit, every god, as an active part of the great whole, of that reality which is behind and beyond the flow of phenomena." This philosophy it is which has given to the Oriental his marvelous comprehension of Nature in all her moods and works, no matter how trivial. With a flower, a bird, a tree, he feels a sense of kinship which must of necessity be denied to his more sophisticated brother of the West, and the Chinese artist strives to interpret the very soul of Nature, as our portrait painter strives to unveil the most intimate characteristics of those whose features he is delineating.

We cannot too strongly emphasize this point—the difference between the ideals of the East and those of the West.† To comprehend Oriental Art we must detach ourselves from our traditional culture; we must sympathetically accept a psychology, a philosophy differing widely from

* The drawing of lines is so important in Chinese art that the practice and study and final mastery of the line stroke itself becomes the first necessity imposed upon the painter. There are, for instance, "16 ways of drawing the wrinkles or curvatures of mountains, corresponding to the different types of geological formation, and each way has its own name," suggested by a fancied resemblance of the line to some object. There are 18 kinds of lines used in drawing dresses.

† "One great difference between our painting and that of the Far East is that, whereas we have perfected the means of giving the illusion of the actual, outward appearance of nature, Chinese painters strive to give not a resemblance, but an interpretation of the inner meaning of things."—*Miss Amy Grace Maher, in American Magazine of Art.*

THE HOME OF TAO YAN-MING
By Kuo Hsü of the Ming period

our own. In China, as the individual is absorbed in the family, so the family is absorbed in the clan; this clan again is but a unit of the state, which in itself has ever been regarded as one great family, merging into the bosom of Nature herself, Heaven the Universal Father, Earth the Universal Mother. Such is the conception of Creation held in the Far East. The men of China have ever chosen natural objects—mountains, rivers, and so forth—as intermediaries between themselves and the deities of heaven and earth.

An agricultural people, dwelling in a land in which every human need can be supplied, a land isolated by great natural barriers from intercourse with the rest of the world, it is not strange that the Chinese live on terms of intimacy with Nature unknown to those that inhabit less genial climes.

Technic and Perspective

The Six Necessities* contribute their united evidence to set forth that the chief quality required of the Chinese artist is a vigorous, rhythmic vitality. A long study of his subject, a comprehension of its very soul, enables the painter to set it forth upon his silk, or his paper, as the case may be, with rapid, decisive strokes in which it must be remembered there can be no alteration, no correction. No painting out, as with us, is possible; the silk or the soft paper used absorb instantly the color lined thereon. It is this quality of the medium, perchance, which renders a great Chinese painting so spontaneous and sincere, and a poor copy so "cabined, cribbed, confined," if one may apply such a metaphor. And now a word as to the status of a "copy" in Chinese art.

A well-known artist would invariably collect about him a group of students and admirers who would paint in the style of their master, frequently, indeed, reproducing his works; unless, however, these were instinct with life they were considered worthless. Certain subjects, too, he would treat in such a masterly manner as to make them his own, as it were, and through the succeeding ages such subjects would be always thought of in connection with his name. In the early days paintings were seldom signed, and, when, in later years, the passion for cataloging came into vogue, signatures were often placed on paintings, in reality as a sort of classification.

* The six necessities of Chinese Art: (1) Vitality of conception must be combined with strength; (2) Stroke of brush must be firm; (3) Peculiarities of method must be in accordance with reason; (4) Color must be harmonious; (5) Brush must be handled with ease; (6) In copying omit all that is inferior.

A word as to perspective. To appreciate Chinese painting at its true worth we must adopt a point of view differing in many ways from that in which we have been educated. We must realize that the outlook of the artist is that of a bird on the wing, and that the perspective in the apparently fantastic landscapes we are studying seems strange, because, in the majority of cases, the painter has regarded his subject from above, he has walked among the mountains or has remained seated by the window of his rustic dwelling, gazing down upon the scene before him, until it has impressed itself upon his very soul; then, and then only, has he, in the privacy of his chamber, transferred it to his silk. "I have it all in my heart," was the reply of the great Wu Tao-tzŭ to his Emperor who had despatched him to depict the beautiful scenery on the Chia-ling river, Seu-ch'uan, and who was amazed when the painter returned empty-handed.

THE "THREE STARS" AND THE "FIVE BOYS"

(The "Five Boys" convey the wish, "May you have five sons and may they all attain official rank)

By Chao Shou of the Ming period

AN EMPEROR OF THE T'ANG DYNASTY DISGUISED AS A STREET VENDOR

By Wang I of the Yaun period

In the possession of Mrs. John D. Rockefeller, Jr., New York

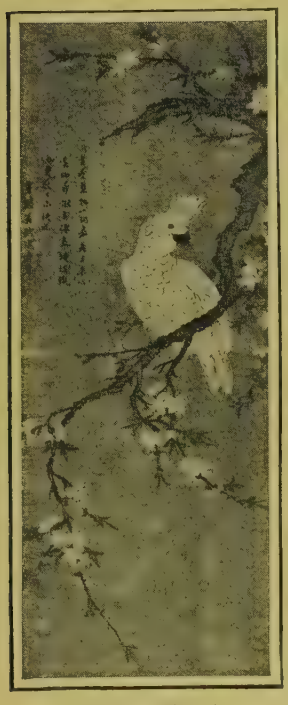
Now to return to the history of Chinese Art. In the Chinese catalogs many paintings are described which date from the first years of our era, but the earliest example extant is, as far as we know, the scroll now preserved in the British Museum; the scenes illustrate a short composition consisting of precepts addressed to the ladies of the Imperial Harem, entitled "Admonitions of the Instructress in the Palace." The artist, Ku K'ai-chih, lived nearly a century before the Saxons under Hengist and Horsa settled in Britain—about 350 A. D.

The scroll, which is in nine scenes, is fully described by Binyon; after enumerating these scenes he thus concludes:

"Domestic harmony is the moral. All through these maxims runs a strong vein of Taoist philosophy, applied to the vindication of polygamy. No one can please forever. When love has reached its

height, it begins to diminish. This is a law of nature to which all must submit. That is the burden of the admonitions."

In the middle of the scroll is a landscape, and this apparently is the only crude portion of the work—the mountains are out of proportion and stiffly drawn; thus we see that, as with Western art, figure-painting was the first to arrive at maturity.



WHITE PARROT
Late Yuan or early Ming period

Chinese Art Subjects

Let us consider for a moment the subjects that have provided inspiration to the Chinese artists; first, those great symbolic figures connected with the early Nature worship—the dragon which rules the spiritual forces of the world and the tiger which rules the material; then the subjects provided by the faith of Taoism and Buddhism. Popular Taoism treats of the fantastic, the magical, the supernatural; of demons, fairies and *hsien jen*, those mortals who by long communion with Nature have attained to supernatural powers. Buddhism, introduced from India 67 A. D., contributed an utterly different spirit—one of intense meditation and concentrated calm. The heroes and heroines of history and romance also inspire work of interest and merit. Among Taoist subjects, besides those described in connection with the Mentor gravures, one of the most popular is that of the "Three Stars"—three old men representing Happiness, Emolument and Longevity. Two illustrations are given—one is of the "stars" mentioned, and the "five boys." Poring over a map of the five sacred mountains, the wish expressed is: "May you have Happiness, Emolument and Longevity, and may sons be born to you, all of whom shall attain official rank." In the other the trio is seated upon a rock enjoying a lovely view, and in a boat we see the fairy Ma Ku approaching, evidently on her return from the Western Paradise.

HOME AND LANDSCAPE SCENE
Ming period

Chinese ancestral portraits (much admired by Western peoples, who liken them to "Holbeins" and to the work of various old masters) are never, for religious reasons, met with in the collection of a Chinese amateur. Such portraits—"Ta Shou," as the Chinese call them, are occasionally painted during the lifetime of the subject: as a rule, however, the painter is not called in until after death, when he makes a careful sketch of the face, completing the figure at his leisure. During the funeral ceremonies the portrait is hung directly above the coffin, when it is supposed to be inhabited by the spirit of the dead. After the procession to the grave it is carefully stored, either in the private ancestral hall or in one of those called "Tzŭ T'ang," which are built for the common use of many families. Its only appearance in the home is during the first six days of the year, when all ancestral portraits in the possession of the family are hung, and when obeisance is paid to them.

THE SON OF TS'AO TS'AO HASTENING TO HIS FATHER'S FUNERAL
By Hsieh Shih-Ch'en, Ming period

And now we must consider that marvelous branch of Chinese painting, landscape—the division which the Chinese themselves designate as that of "hills and water." Confucius says: "The man of knowledge finds pleasure in the sea, the man of virtue finds pleasure in the mountains. For the man of knowledge is restless and the man of virtue is calm. The man of knowledge is happy and the man of virtue long-lived."

The marvelous command of line possessed by the Oriental enables him to present with singular force the rhythmic rise and fall of great waves.

Kuo Hsi, one of the greatest of all Chinese landscape painters, published an essay on landscape. "Though we may long," he says, "to yield to our instinct and fly from cities to the woods and wilds, to the hills and musical streams in which the soul of man delights, yet ought we not to disown society. Here is the boon of the painter's art, that in the midst of care and toil it can liberate the mind and bring it into the august presence of nature."

The division into what are known as the Northern and Southern schools of painting took place under the T'ang dynasty (618–960 A. D.), when men had begun to search for spiritual meanings beneath the outer semblance of their surroundings. The school first-named was founded by Li Ssu-hsun, the latter by Wang Wei. The characteristic of the Northern school is a certain virile sternness; that of the Southern, delicate refinement.

THE FAIRY MA KU AND THE "THREE STARS" OF HAPPINESS, EMOLUMENT AND LONGEVITY
By Hsieh Hsien-ya, Ch'ing period

A Japanese critic, Sei Ichi Taki, thus describes the two:

"Broadly speaking, the essential differences which distinguish the two are these: in the landscapes of the Northern school the whole stress is laid on sublimity and strength, while beauty, grace, characterize the works of the Southern school. An intelligent understanding of this subject requires an extended study of the technics adopted by each school for the treatment of natural subjects, but the distinction of the two styles is most unmistakable in their methods of rendering the 'Ts'un wrinkles, or mountain outlines.'

"Let us pause for a moment, and see with what nicety of distinction and with what variety of strokes the celestial landscape painter drew mountains in their manifold contours. Ancient Chinese artists made exhaustive investigations of the subject, and laid down elaborate rules consecrated by the sanction of ages. Definite strokes were prescribed for the representation of mountain curvatures, or wrinkles, each being designated by a picturesquely expressive title. The authorized titles are as follows: wrinkled like hemp fibers, like an unravelled rope, like bullock hair, like alum crystals, and so on. None of these modes of treatment are to be regarded as the product of idle fancy, for they were really thought out from actual observations of nature."

Of Wang Wei, founder of the Southern school, it is written:

"Wang Wei was a physician; he was even more famous for his poetry than for his painting. Born in 699, he spent some years in official life, and falling a victim to intrigues was imprisoned for some time by a rebel chief. When he was thirty-one he lost his wife, and thereafter retired to seclusion and the cultivation of his chosen arts. He was a devout Buddhist, and died in 759.

"Of Wang Wei it was said that his poems were pictures and his pictures poems. A proverbial saying about the two arts embodies the same conception, which the Chinese regard as ideal. To interpret a mood, not to record facts, has been for them the essence of landscape painting."

Such a mood could well be expressed by our musicians; indeed, more than one critic of note has likened Chinese painting to the great compositions of our composers.

In conclusion I quote the sentence with which Binyon closes his sympathetic study of painting in the Far East:

"We shall study this art in vain if we are not moved to think more clearly, to feel more profoundly; to realize, in the unity of all art, the unity of life."

Nor can one too strongly emphasize the fact that in the East as in the West the first question to ask of a painting is, "Is it beautiful?" The art of the Far East is universal in its appeal—and for all time. As the old critic, Hsieh Ho, who lived 475 A. D., wrote, "In Art the terms ancient and modern have no place."

WANG HSI-CHIH INSCRIBING A FAN
By Chên K'o-chia of the Ch'ing period

Chinese Painting

Table of Dynasties and Comparative Dates in Western History

Shang	B.C. 1766-1122	
Chou	B.C. 1122- 225	
Ts'in	B.C. 255- 206	
Han	B.C. 206-A.D. 220	Cæsar invaded Britain B.C. 55
Wei	A.D. 220- 246	
Tsin	A.D. 246- 420	Saxons arrived in England under Hengist and Horsa A.D. 449
Period of Unrest	Six short-lived Dynasties	
T'ang	A.D. 618- 906	Alfred the Great A.D. 871-901
Five Dynasties	A.D. 906- 960	
Sung	A.D. 960-1277	
Yuan (Mongol)	A.D. 1277-1368	Beginning of Italian Renaissance, Giotto 1266-1336
Ming	A.D. 1368-1644	Fra Angelico 1387-1455, Botticelli 1447-1510, Michelangelo 1475-1564, Raphael 1483-1520
		Ending of Italian Renaissance
		Sailing of the *Mayflower* 1620
Ch'ing (Manchu)	A.D. 1664-1912	Cromwell died 1658
		Modern History

The names of a number of artists are mentioned in the early periods of Chinese history, but the first artist of whose work we have an example is Ku K'ai-chih, who lived during the Tsin dynasty in the fourth and fifth centuries of our era.

Under the T'ang noted names are: Li Saŭ-hsün, Wu Tao-tzŭ, Wang Wei, Han Kan.

Under the Sung noted names are: Fan Kuan, Kuo Hsi, Li Lung-mien, Mi Fei, Ma Yuan, Hsia Kuei, Mu Ch'i, Chao Ch'ien-li.

Under the Yuan, or Mongol dynasty, noted names are: Chao Meng-fu, Yen Hui.

Under the Ming noted names are: Lin Liang, Shen Chou, T'ang Yin, Chiu Ying, Wu Wei, Wen Cheng-ming.

Under the Ch'ing noted names are: The four "Wangs": Yün Shou-p'ing, Pien Shou-mien, Jen Po-nien, Hsü Ku.

THE IMMORTAL HO SIEN-KU
By Wang Chên-p'eng of the Yuan period

PORTRAIT OF AN OFFICIAL
Ming period, unsigned

Classification of Chinese Paintings as to Subjects

1. Buddhist and Taoist Scenes
2. Human Figures
3. Palaces and Houses
4. Barbarian Life
5. Dragons and Fishes
6. Landscapes
7. Animals
8. Birds and Flowers
9. Bamboos
10. Fruit and Vegetables

As given in the Imperial Collection of the Emperor of Sung A.D. 1101-1125 (from "Catalogue of Paintings in Metropolitan Museum," Ferguson).

Classification of Chinese Paintings as to Sizes

TA CHUNG T'ANG — LI CHOU — CHUNG T'ANG
P'ING T'AO — HÊNG P'I

These are designed for wall decoration and are hung according to certain conventions. The Ta Chung T'ang and Chung T'ang are hung upon ceremonial occasions, the former opposite the door in the central hall of a Chinese house, the latter, in pairs, on the side walls of this same hall. The place of the Chung T'ang may be taken, on ordinary occasions, by sets of scrolls upon which are written couplets or quotations from the classics.

MA KU AND ATTENDANT
By Chang Huan of the Ming period

The rules governing the hanging of pictures in the inner rooms of a house are less strict, and here we may find on the center wall a Li Chou which is of a size smaller than the two preceding, while on the side walls may be hung P'ing T'ao—the small pictures in sets of four—or Hêng P'i, by which name are known the highly popular horizontal pictures. Shou Chüan, and Tsê Yeh are the names by which are known, respectively, the hand scrolls and the albums; the latter are made of long strips of folded paper.

SUPPLEMENTARY READING

EPOCHS OF CHINESE AND JAPANESE ART, two volumes. *By Ernest F. Fenollosa*

PAINTING IN THE FAR EAST. *By Laurence Binyon*

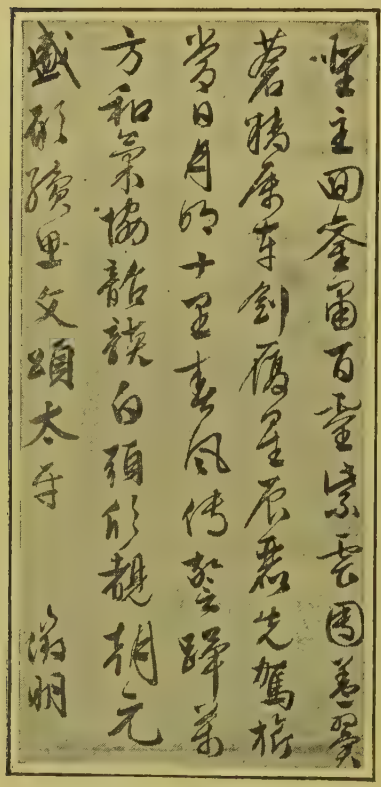
CHINESE AND JAPANESE PAINTING. By Amy Grace Maher in the *Amer. Mag. of Art*, April, 1918.

FLIGHT OF THE DRAGON. An Essay. *By Laurence Binyon*

CHINESE PAINTING; ITS SIGNIFICANCE AND ITS EFFECT ON AMERICAN ART. An article by M. Maclean in the *International Studio*, July, 1917.

***Information concerning the above books may be had on application to the Editor of The Mentor.

THE OPEN LETTER



THE EMPEROR RETURNS FROM A JOURNEY TO THE SOUTH

An example of calligraphy by Wên Chêng-Ming, Ming period. Below is an English version by the American poetess, Amy Lowell, as published in the magazine "Poetry."

Like a saint he comes,
The Most Noble.
In his lacquered state chariot
He awes the hundred living things.
He is clouded with the purple smoke of incense.
A round umbrella
Protects the Son of Heaven.
Exquisite is the beauty
Of the two-edged swords,
Of the chariots,
Of the star-embroidered shoes of the attendants.
The Sun and Moon fans are borne before him,
And he is preceded by sharp spears,
And the blowing brightness of innumerable flags.
The Spring wind proclaims the Emperor's return,
Binding the ten thousand districts together.
In a chorded harmony of Peace and Satisfaction
So that the white-haired old men and the multitudes rejoice,
And I also wish to add the tribute of my secret writings.

THE Chinese and Japanese arts have been on the list of Mentor subjects for a long time. The difficulty has been to find someone of sufficient authority, who could write articles on the art of the Far East suitable for The Mentor. We wanted articles prepared by writers that knew Chinese and Japanese art at first hand—that had lived long enough in China and Japan to get the feeling of the art of the East and to be familiar with the atmosphere in which that art was cultivated and developed.

★ ★ ★

Our requirements were met in a happy manner in the case of Chinese art. One day in February last Mrs. Francis Ayscough, long a resident of Shanghai, came into the editorial office of The Mentor and told us enough about Chinese art in a half hour to convince us that we had found the right one to treat that subject. Are you surprised that Mrs. Ayscough knew about The Mentor? If so, let me tell you that there are Mentor readers in Shanghai, Hong Kong, and Peking, and also in Japan. It was only natural, then, that Mrs. Ayscough, on reaching New York, should have come with her suggestion to The Mentor office—and, you may be sure, we were glad to hear her story, and counted the morning of her call a fortunate one.

★ ★ ★

"I have lived in China for about twenty years," Mrs. Ayscough said, "and for the last ten years I have been Honorary Librarian of the North China Branch of the Royal Asiatic Society. Through that office my interest in Chinese art and Chinese civilization was aroused, and I gave much of my time to study and observation. My husband has been a merchant in Shanghai for many years. Not long after we settled in China, chance circumstances brought into our hands a collection of Chinese writings and paintings that had been gathered together by a native collector during the course of half a century. In this collection were many rare and valuable pictures. There is no such thing as setting any definite value on this art because there is no way of assigning a market price to productions that might justly be termed 'priceless.' My studies in Chinese art had taught me enough to appreciate in full measure the extraordinary interest of the art treasure that had come into my possession. With this wonderful assemblage of exquisite examples of old Chinese art I was able to develop my own knowledge of the subject, and to give the benefit of it to my friends, and, on various occasions, to the English-speaking population of Shanghai. I brought the most valuable pieces in this collection to the United States in order to show them in New York and other cities. A number of the finest paintings have gone into the possession of private collectors, some of whose names are mentioned in the present number in conjunction with the reproductions of the pictures."

★ ★ ★

In simple, condensed Mentor style you will get in this number the essential things that one should know about Chinese art. The reproductions of the pictures speak for themselves. I wish that the Chinese names could speak for themselves as well. There is, however, no satisfactory way of indicating Chinese pronunciations. The language is one of signs and not of letters. The only way to indicate pronunciations, then, is to try to spell the sounds with English letters, and that is what has been done in this article. Any reader, determined to get the exact pronunciation of the Chinese names, must seek out someone who is familiar with the Chinese language, and "learn by ear."

★ ★ ★

And now for an article equally interesting and authentic on Japanese art Who shall write it? Wait and see.

W. D. Moffat

EDITOR